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# Rural organizations and land utilization on Muscatine Island: A study of social adjustments

Ray E. Wakeley  
*Iowa State College*

J. Edwin Losey  
*Iowa State College*

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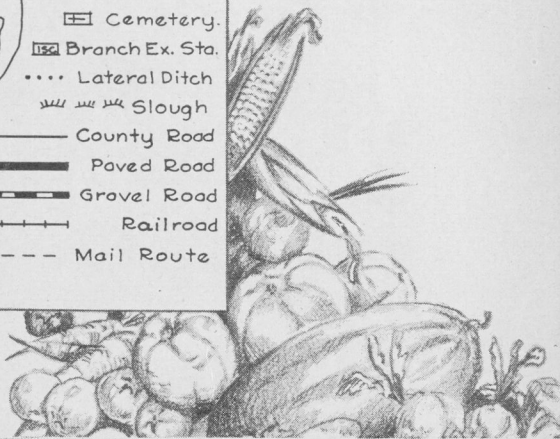
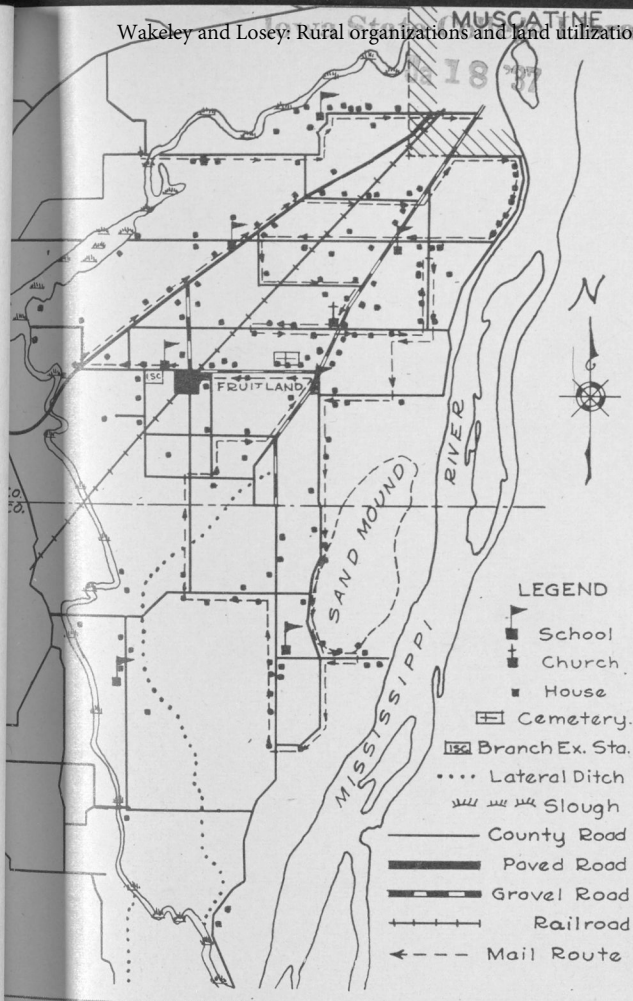
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# RURAL ORGANIZATIONS AND LAND UTILIZATION ON MUSCATINE ISLAND

## STUDY OF SOCIAL ADJUSTMENTS

AGRICULTURAL EXPERIMENT STATION, IOWA STATE COLLEGE OF AGRICULTURE & MECHANIC ARTS  
 R. E. BUCHANAN, Director  
 RURAL SOCIOLOGY SUBSECTION, AMES, IOWA





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# RURAL ORGANIZATIONS AND LAND UTILIZATION ON MUSCATINE ISLAND<sup>1</sup>

## A Study of Social Adjustments

BY RAY E. WAKELEY AND J. EDWIN LOSEY

Muscatine Island was selected as the area for this investigation because it was relatively small, isolated and characterized by a distinctive type of farming (fig. 1). It was a problem area where farming offered only limited security, where income was low and success difficult to attain. Problems of land utilization and social organization had arisen frequently on the Island. Alternative choices in farm enterprises and in social organizations were few. In such an area the complicated relations between organizations and land use were relatively easy to isolate and describe.

The central problems of this study are problems of rural organizations and their relation to land utilization. What rural organizations had developed on Muscatine Island in the past? What changes took place in Island organizations and what were the factors associated with changes which were made? What organizations were functioning at the time of this study? What were the relations of these organizations to the problems of land utilization commonly recognized on Muscatine Island? What changes might be made in organizations which might enable them to contribute more effectively to social and economic developments? How might such changes be made?

Land utilization on Muscatine Island raised important economic and social problems. From the economic point of view was the soil suited to a commercially successful farming program? Were local financial resources sufficient to support a program of commercial production? Were local marketing conditions such that the farmers received the largest possible share of the price which the consumer paid for his produce? In this investigation only the social aspects of these economic problems were included. Marketing was stressed more than the other problems mentioned; and an attempt was made to determine whether the farmers on Muscatine Island have the

<sup>1</sup>Project 357, Iowa Agricultural Experiment Station.

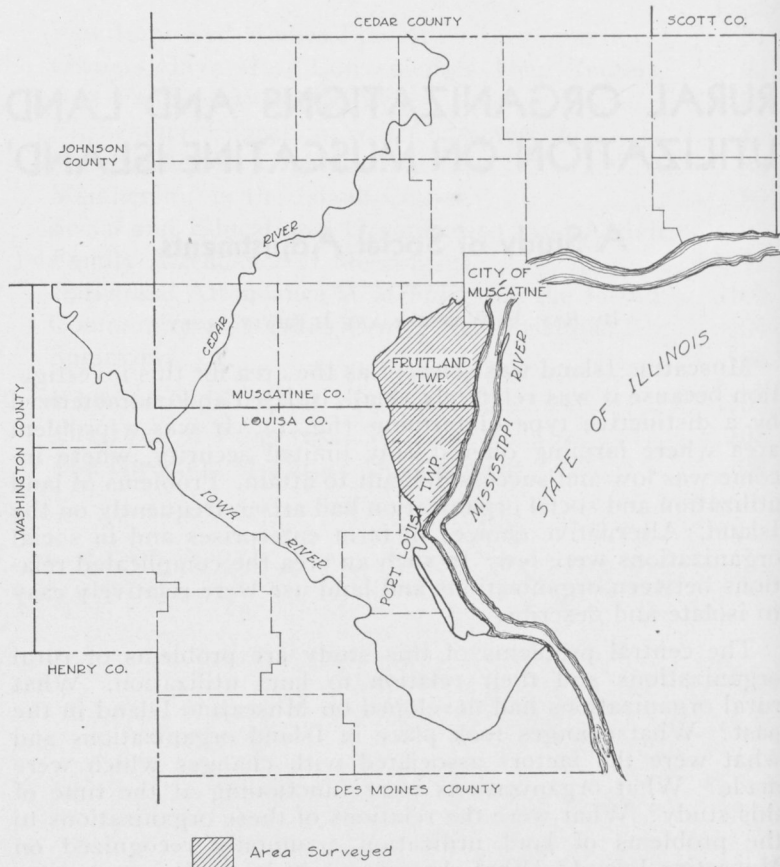


Fig. 1. Map of Muscatine Island and adjacent territory. The Island is located along the river, south of the city of Muscatine, part in Muscatine County and part in Louisa County.

knowledge, the stability, the experience with organizations, the leadership and the attitudes necessary to enable them to succeed in marketing their products cooperatively.

Sociological problems on the Island, quite as numerous as the economic problems, were no less pressing, though not always so tangible. Did the Island have on it the number and quality of population necessary to use the available land? Were the families adequately housed? Had the people enough knowledge and experience with organizations to successfully manage farm and community enterprises? How had their experiences influenced their thinking about farming and land utilization? What were the prevailing attitudes and opin-

ions held on the Island, and how did these relate to land planning and land use? Were the farmers on the Island willing and able to make necessary changes? Was leadership available to develop sentiment for and to organize, guide and direct the necessary changes?

No attempt was made to investigate these problems in their entirety. Attention in this investigation was concentrated upon sociological factors and the relation of these factors to land utilization. An effort was made to discover how sociological factors may promote or hinder the development of a system of land use which would raise the level of living of farm families and the cultural level of the Island.

### METHOD AND PROCEDURE

The basic information for this investigation was secured through personal interview with members of each of the 169 families living on the Island. During the interview, a schedule was filled out, and additional notes were later recorded in diary form to assist in interpreting information on the schedules.

The junior author lived on the Island during the entire time of the survey, from Nov. 1, 1933, to Feb. 1, 1934. During this time he was invited to one or more meetings of each Island group. Thus he was able to participate in and observe the activities of all organizations. Additional information was secured with the help of local leaders who acted as participant observers and kept records of programs and attendance.

Information concerning the history and early development of the Island was secured from historical records, newspaper files and scrap books, and it was supplemented by the observations of older residents on the Island.<sup>2</sup>

### EARLY SOCIAL AND ECONOMIC DEVELOPMENT

Muscatine Island, located south of the city of Muscatine, has an area of 22,000 acres, 17,000 of which are suitable for farming. Two-thirds of the Island is in Fruitland Township, Muscatine County, and one-third in Port Louisa Township, Louisa County (fig. 1). Families living on the Island at the time of the survey totaled 169, of which 134 lived on farms.

Muscatine Island was formed by a change in the course of the Mississippi River, which formerly flowed west of the Island. Muscatine Slough, a sluggish, meandering stream, follows the course of the former river channel and separates the Island from the mainland. Beyond and west of the slough

<sup>2</sup>Older residents and local leaders freely gave the time and effort necessary to obtain the desired information. Special acknowledgment is given these persons and to all the families on the Island who assisted so splendidly in obtaining the necessary information.



is the bluff, formerly the west bank of the river, which further isolates the Island from the higher, more rolling farm land beyond (fig. 4).

The first permanent settlement on the Island was made by white people in 1836 when the Mascoutin Indians relinquished their claim.<sup>3</sup> Many Illinois corn growers were among the early settlers on the Island. As was their custom, they planted large acreages to corn. However, floods, occasional drouth and a sandy soil—all unsatisfactory for raising corn—discouraged this type of farming. Previous to the Civil War, there arose an opinion among local people that “when a farmer moved to the Island he was taking a short-cut to the poorhouse.”

Records of the first school on the Island were not available, but it was established at an early date. A teacher who taught on the Island between 1860 and 1870 mentioned four schools in operation at that time.

The Island Cemetery, located on higher ground near the center of the Island, was the second service agency to be established. The earliest date on a headstone was 1855, but there was evidence of earlier graves.

Social activities among early residents consisted of little more than neighboring and neighborhood social activities. Little or no organization was needed, and few records were available. Most of the facts concerning Island groups and their development were given by older residents.<sup>4</sup>

A dam built across the north end of the slough in 1845 permanently joined the Island with the mainland.<sup>5</sup> A sawmill was built in Muscatine in 1827, and lumber manufacturing, with sawmills and sash and door factories predominating, was the leading industry in Muscatine for more than 50 years. A large portion of the northern end of the slough and low areas nearby were filled with the waste from this industry. South Muscatine and Musserville, developed in this area and located mostly on land which was formerly a part of the Island, are now part of the city of Muscatine and are not included in this study.

<sup>3</sup>Mascoutin means Nation of Fire, so called because of the prairie fires which frequently swept across the entire Island. One hundred years later grass fires on the Island are still frequent and dangerous.

<sup>4</sup>Lack of written records, characteristic of most informal neighborhood groups, applied also to Island Institutions and this condition persisted to the time of the present study. In 1933 no continuous record was available for any Island group organized prior to 1915. Records of the church, the cemetery association, the lodge and the cooperative marketing association had been either lost or destroyed by fire. Partial records were available for the literary society. This condition is characteristic of the period of social disorganization described in a later section of this report.

<sup>5</sup>Historical materials were secured from the following sources: Richman, Irving B., History of Muscatine County; Walton, J. P., Personal scrap books, unpublished.



Floods were common on the Island and frequently destroyed crops and menaced homes. After a particularly severe flood in 1851, Island farmers started to build a levee extending along the bank of the Mississippi the entire length of the Island. The building of the levee constituted the first organized attempt by Island people to solve a major socio-economic problem relating to the use of land.

Early residents of Muscatine and nearby places were interested chiefly in the Island as a sportsman's paradise. Game and fish were abundant, and hunting and fishing parties were numerous. Hunting lodges were erected along the shores of Lake Keokuk; at least one of these at the time of this study was being used as a farm home. A racetrack was built on the northern end of the Island. Here horse races were held as frequently as once a week. These sports were organized and participated in mostly by persons not residents of the Island.

#### ISLAND AGRICULTURE CHANGED

Island farmers had tried, with some success, to grow melons previous to the Civil War. The first carload of "Muscatine melons" was shipped from the Island in 1862. This was indicative of the fundamental change in type of farming by which melon growing replaced corn growing. By 1870 the commercial production of melons and cantaloupes was firmly established. Sweet potatoes, which were grown successfully on the Island during the decade following the Civil War, soon became one of the most important crops. Production of other vegetable crops, including cabbage, tomatoes, cucumbers and asparagus, increased during the decade following the Civil War. Canning factories, established in Muscatine, encouraged the growing of these crops, and large acreages were grown on the heavier soil near Muscatine.

A revival of faith in the possibilities of agriculture on the Island accompanied the change in type of farming. Settlement of the Island progressed rapidly and by 1882 was almost complete. The number of land owners (169), reported at that time, is exactly the same as the number of family interviews obtained in 1933.

#### THE ISLAND CHURCH WAS BUILT

A Methodist Episcopal church was organized on the Island and was built in 1868. The original church edifice still stands on its original site. The Island Church, as it was called, was the earliest institution with a community wide membership. It was the first organized group on the Island and still exists. The building of the church was a community event made pos-

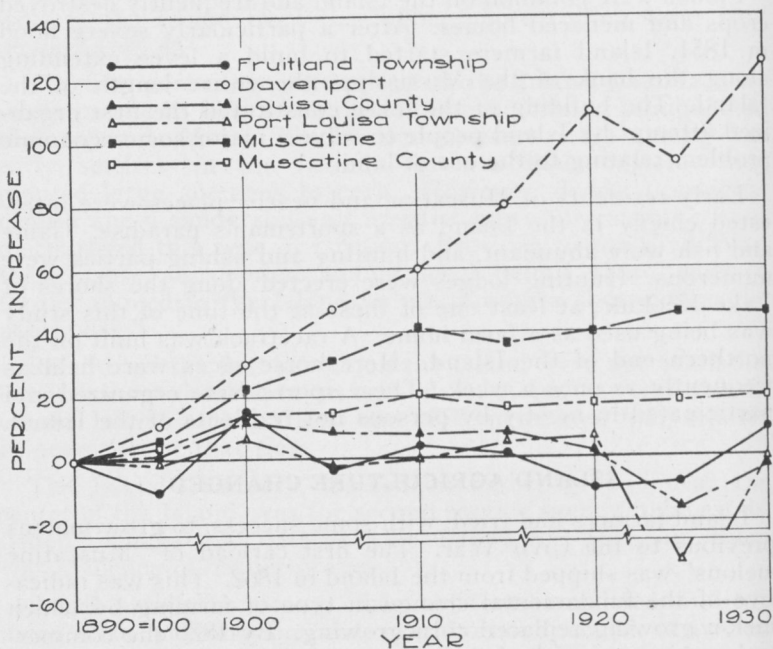


Fig. 2. Trends of populations of Muscatine Island and adjacent regions, 1890-1930. Rural population remained practically stationary from 1890 to 1930, during which time the population of the nearby cities, Muscatine and Davenport, doubled.

sible by labor contributed by Island families. The continuous influence of the church has been a tremendous force in Island development.<sup>6</sup>

A cemetery association, controlled by the official board of the Island Church, was organized. This association improved and beautified the cemetery with extensive plantings of evergreen trees. Cemetery clean-up day became an annual event on the Island. As most Island families had friends or relatives buried there, clean-up day provided an occasion for expressions of mutual sympathy and increased fellowship.

The Island Church Ladies' Aid and Reading Society was organized in 1905 with 11 members. Meetings were held at the homes of various members every 2 weeks. Some meetings were social in character, but work, such as quilting or sewing, featured the regular meetings of the society—which grew until it potentially included all the women of the church.

<sup>6</sup>Unfortunately, all church records were destroyed by fire during the summer of 1933. One of the tasks of the present study was to establish a membership roll which could be used as a basis for continuing the organization.

### FARMERS STARTED FRUITLAND

As melon production increased, hauling the melons to Muscatine became an arduous task. Island growers formed a stock company and petitioned officials of the Chicago, Rock Island and Pacific Railroad, which first operated a train across the Island in 1858, to establish an Island station for passengers and freight. A site near the center of the Island was proposed by the Island growers, and a town, called Melon, was laid out there in 1879. For a cash consideration of \$1,000 and certain grants of land in and near the proposed site, the railroad established a station which the officials, contrary to the wishes of the local people, named Fruitland (fig. 3). The first carload of melons was shipped from Fruitland in 1880. During the next 25 years, 500 or more carloads of melons were usually shipped out annually, and shipments totaling 700 carloads per year were not uncommon.

Fruitland grew rapidly from 1880 to 1890, and, although it remained an unincorporated hamlet, it became the social and business center of the Island. In 1889 the principal service agencies were two stores, a post office, a railroad station, a blacksmith shop and a lodge hall. Three storage houses were built in Fruitland to facilitate the handling of sweet potatoes.

### MARKETING METHODS ENCOURAGED SOCIALIZATION

Commission buyers, mostly from Chicago and other large central markets, came directly to Fruitland to purchase Island products. Island farmers brought their melons to Fruitland by wagon each day. Here the buyers made their purchases, and the melons were loaded on cars. Farmers met in friendly competition, and prices were determined openly. Premiums paid or discounts made in line with the quality of the product aroused little protest. Sometimes a buyer purchased the entire output of certain growers or occasionally purchased an entire trainload of melons which were shipped to one wholesale house.

Melon marketing made a welcome addition to the social life of the Island. Throughout the marketing season Fruitland was a center of activity out of which neighborliness developed.

### SOCIAL ORGANIZATION DEVELOPED

Two lodges, the Knights of Pythias and the Court of Honor, were organized in Fruitland soon after the railroad station was established. One of the two store buildings had a lodge hall on the second floor which also served as a community hall.

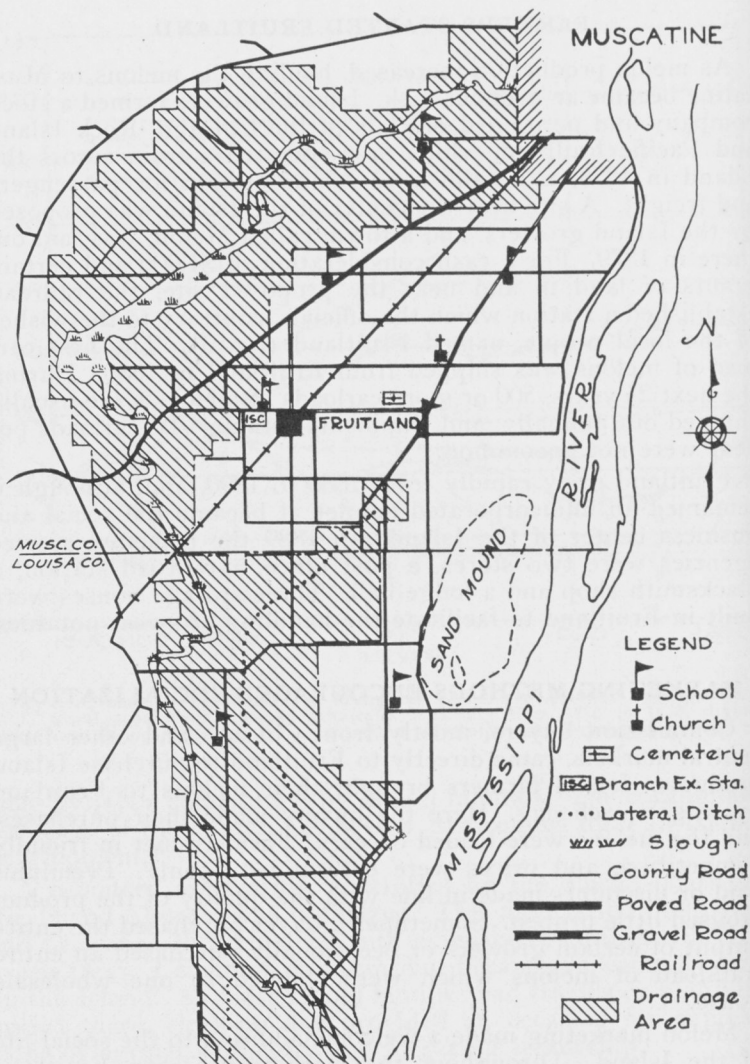


Fig. 3. Map of Muscatine Island showing drainage area. Drainage District Number 13 included in its territory all the heavyland soil on the Island and some of the sandland west and south of Fruitland.

Most Island families were represented in the membership of one of these lodges, while it was not uncommon for persons to belong to both. The activities of the lodges in Fruitland resulted in a marked increase in organized social contacts.

A literary society was organized which flourished intermittently during the three decades following the Civil War. Debates, recitations and dramatic readings and plays were included in the programs.

School and church also served as centers for social activities. They promoted literary programs, box socials, picnics and other special events for the entire community. School teachers were usually leaders in community activities. By living with the various families whose children they taught, the teachers were in position to know the people well and to direct their social activities to advantage. Under their tutelage, local leaders received valuable training, were able to function effectively and usually were rewarded by suitable recognition.

### ISLAND PEOPLE ISOLATED FROM OTHER GROUPS

At this time the Island most nearly approached self-sufficiency. The increased number of social and economic organizations on the Island made going to Muscatine less necessary. Fruitland was considered the center of the developing Island community.

Dissension developed between residents of the northern part of Bloomington Township and the people on the Island who constituted the southern part. Those living in the north insisted that they should not be taxed for the support of the Island schools. This controversy reached a climax in 1887 when a vote was demanded, Bloomington Township was divided, and the Island became the greater part of Fruitland Township, newly created as a result. This political step increased the self-sufficiency of the Island, and the separation of the Island from the country around it became more pronounced.

In fact, the Island was regarded by some as separate and apart from the rest of Muscatine County. Island residents felt this outside attitude keenly and tended to become more isolated. At the same time, this feeling united them locally so long as local affairs ran smoothly. Later, when internal dissension arose, the withholding of outside approval accentuated the local feeling and made the development of a suitable program for the Island more difficult.

The isolation of the Island from the surrounding farming territory was increased further by the change in type of farming. Corn growers and livestock farmers found little in common with these vegetable growers, who engaged in farm enterprises with which they were unfamiliar. A melon country seemed to some of them a different land, inhabited by people who were different.



### LOCAL DISCORD HINDERED ADJUSTMENT

The prevalence of group-making factors did not hide the danger from situations which, even at the beginning of the present century, contained elements of local discord. One of the most serious discords resulted from the rivalry which developed between the hamlet of Fruitland and the Island Church. The church, 11 years older than Fruitland, was considered the most important institution on the Island. During the rapid growth of the hamlet there was considerable agitation by those who felt the church should be moved to Fruitland. Some of the strongest supporters of the church who lived outside of Fruitland strenuously opposed the change. Old customs and old sentiments prevailed. The church was not moved, but this same problem arose repeatedly and constituted a source of irritation and division of opinion, even within the church itself.

Completion of settlement on the Island made it necessary for some young people to find work elsewhere. The movement of population which resulted was enough to handicap the development of activities for young people on the Island and make organization more difficult for them.

As group programs declined, personal jealousy increased, and meetings were sometimes featured by attempts of individuals to dominate others on minor matters, such as knowledge of parliamentary law. Such conflicts occasionally were climaxed by physical combat. One such encounter in 1901 disrupted the community club.

### SERIOUS PROBLEMS ACCOMPANIED CHANGES

Soon after 1900, changes in melon growing profoundly affected the Island. Increased production of melons in other parts of the United States and the use of refrigerator cars increased the competition. "Muscatine melons" could no longer be sold at a premium. Commission buyers made less frequent visits to Fruitland, and marketing problems became acute.

A local cooperative marketing association was organized in 1905, and carload shipments were consigned to various wholesale produce houses and commission firms. Uncertain yields, unsatisfactory railroad service and low prices were among the difficulties which beset the organization. Island growers lacked experience in selling melons on the large central markets, and this, combined with their loosely regulated methods of doing local business, made the association unprofitable and unpopular. Dissatisfaction arose among the members of the association concerning the prices received, the grading of melons by the association, and the intrusion of



non-members who were allowed to ship through the association. Dissatisfaction and distrust multiplied until the strife caused some larger growers to market independently, while others shipped with rival factions outside the association. The marketing association became less effective until 1912, when it became inactive.

### WILT REDUCED MELON PRODUCTION<sup>7</sup>

Melon wilt became a major factor in Island agriculture in 1908. During the next 10 years this disease decreased annual yields and was a constant cause of extreme economic reverses to melon growers. Careful estimates indicated that the acreage of melons on the Island was reduced 90 percent during that time. Uncertain yields and attendant low quality of the melons grown made large shipments practically impossible. Melon wilt was thus a major cause of the lower income from melons and of the unsatisfactory returns from Island agriculture.

Where melons formerly had been grown on the same ground year after year, the wilt made it impossible to produce a profitable crop of melons oftener than once in 7 years, while twice this time was needed to make a crop reasonably certain. This threw thousands of acres of sandland into idleness, and, since no other crop was used to replace melons as a source of cash income, idle land and resulting lack of income remained major problems at the time of this study.

The prevalence of melon wilt encouraged the production of sweet potatoes, and at the time of the present survey this was the most important sandland crop on the Island. The production of other crops, such as cantaloupes, asparagus and cabbage, was often unsuccessful because of the presence of other plant diseases, less spectacular than melon wilt but quite effective in reducing yields.

### CHANGES IN MARKETING AFFECTED ORGANIZATION

Loss of central markets, growth of nearby cities and the decline in melon production made it more difficult for growers to ship in carlots and seriously affected the marketing situation.

As the central marketing which they had formerly practiced ceased, farmers missed the sociability which had accompanied the marketing season in Fruitland. Adequate information concerning prices was difficult for growers to secure and still more difficult to utilize effectively. Growers found it more difficult to work together.

<sup>7</sup>Watermelon wilt is caused by a microscopic, soil-inhabiting organism, *Fusarium niveum*, which doubtless came to Iowa on watermelon seed. Bacterial wilt and mosaic are commonly found on cantaloupes.

Leading families either did not sense the change or felt quite powerless and so did not act to save the community. By allowing the necessary period between crops of melons, they continued to grow them with some success; by renting land on the Island which had not produced melons, they were able to maintain their own volume of production; and by skillful marketing, they were able to secure higher returns than their neighbors. Sometimes they could purchase melons from their neighbors at current local prices and market them at a profit. Since success attained along these lines aroused jealousy which made their leadership ineffective, the more successful growers concentrated their attention more and more on their own business, and community leadership was lost. Social and economic disorganization continued.

### SCHOOL AND CHURCH CHANGED

The schools, which had been the common centers for neighborhood events, largely ceased to function in this capacity. Schoolhouses seldom were used for public meetings, and few school programs were presented. School teachers lost the leadership formerly accorded to them. Many of them lived outside the community and neither helped direct community affairs nor led social activities.

The church was the only institution which maintained a strong hold upon the community. As Fruitland declined, the church, comparatively speaking, rose in relative power and importance. The firm grasp of older residents upon church policies and procedure held it firmly to traditional ways. Its position of dominance was maintained by the use of ministerial authority made necessary by weak local leadership. This dominance of the church was extended to other Island affairs, especially social activities, and those not sponsored by the church and governed by its philosophy were not encouraged. On this issue the church became an organization divided against itself, with the more liberal families contesting unsuccessfully for a more liberal church policy toward other community activities.

Meanwhile, the social area tributary to Fruitland and the church became somewhat smaller, including less than half the Island families, and was composed mostly of those living within the immediate vicinity. In the meantime, rivalries between church and hamlet, as well as discords within the church, combined with other unfavorable circumstances to continue the process of disorganization. In 1923 no voluntary local organizations of Island people were in operation. Social activities on the Island were limited to those promoted by three basic institutions: Home, church and school.

### FRUITLAND DECLINED

With the reduction in melon production, Fruitland declined as a shipping center. In 1909 the combined store and lodge hall burned, and the building was not replaced. Discarded as a market center, inadequate as a trade center and lacking a social meeting place for the community, the decline of Fruitland was rapid. The local post office and rural mail delivery route remained. One general store continued, but much of the business was done on credit, and collections were uncertain.

Automobiles and good roads shortened the time necessary to make the 6-mile trip from Fruitland to Muscatine until the city and its services were only a few minutes away. Since Fruitland offered comparatively few and unspecialized services, it was used as a center for loafing, as a trading center during seasons when trips to Muscatine were impractical, and as a source of supplies for those persons who needed local credit. The loss of store and lodge hall by fire in 1909 was a severe blow to Fruitland and to Island organizations. Lodge meetings were discontinued, and the membership was not transferred elsewhere. Instead of rebuilding the hall, Fruitland remained without a recognized community meeting place. The only place available was the Island church. This building was not a suitable place in which to hold community meetings and had other handicaps previously mentioned.

### THE DRAINAGE DISTRICT ORGANIZED

Drainage District No. 13, organized in 1914, affected the Island situation in several ways. Instituted to drain the slough which forms the western boundary of the Island, it made a large part of the swampy land along the slough available for agricultural purposes. This project was planned to drain and reclaim about 21,000 acres of potential farm land in Louisa and Muscatine counties, approximately one-third of which is Muscatine Island (fig. 3). Slightly more than one-half of this land had been farmed previously. While several of the older residents on the north end of the Island had farmed extensively on the heavier soil previous to the organization of the drainage district, the heavyland farmers, as they were called, had been in the minority.

Drainage of the loam or heavyland soils increased the number and importance of the heavyland farmers who specialized in the production of grain and livestock.

Island organizations were faced with the problem of absorbing a new Island population which, for topographical reasons, could not easily go elsewhere. This was not done for several reasons: (1) The special social importance of this problem

was not recognized by Island people; (2) Island groups were not organized strongly enough to do the job easily and well; (3) the newcomers were livestock and general farmers who had little in common with the specialized vegetable growers on the sandland, and (4) the heavyland farmers were located on the far edges of the Island and found it inconvenient and often difficult to come to Fruitland or to the Island church. Thus the drainage district increased the difficulties at the same time that it increased the opportunities for organization on the Island.

Other difficulties were presented by the drainage project. The total cost, including dredging the slough, constructing lateral ditches, building and equipping two pumping stations together with the necessary upkeep, was approximately \$500,000. Non-residents of the district purchased large areas of newly drained land on the Island. Most of these farms were tenant-operated and had not passed into the hands of owner-operators. High taxes and assessments in the district were accompanied by low prices for farm products following the World War. Tax delinquency and the resulting tax sales further increased the number of absentee owners, especially in Port Louisa Township where farmers were not anxious to own land because of their inability to pay the fixed charges against it. Renters who operated these farms moved frequently and took little part in Island organizations.

Several farmers on the sandland who were included in the drainage district insisted that they should not have been taxed to maintain the ditch. Sandland farmers, in general, maintained that the ditch made irrigation more necessary and expensive. When a deposit of silt impaired the operation of the ditch, local opinion was divided concerning the best course of action. But more than half the farmers stated their belief that the drainage ditch should be abandoned and the water allowed to return to its former level. The drainage project included the draining of Lake Keokuk which made the entire area less attractive to waterfowl and reduced the supply and discouraged the natural increase of fish and game. The drainage ditch, which under more favorable conditions might have contributed to agricultural development, constituted both an economic and a social liability to the Island.

#### SUPPLEMENTAL OCCUPATIONS DEVELOPED

During the button-workers' strike in 1911 many persons on the Island learned to cut buttons, and so a new part-time industrial occupation tended to supplement the decreased returns from agriculture. Some men worked on the Island in the newly opened gravel pits near Muscatine, while others secured jobs in Muscatine.



### THE LEVEE REBUILT

The Mississippi levee, between the Island and the river, was entirely rebuilt and made higher in 1921 and 1922. This change, though expensive, was considered by Island farmers to be a necessary and constructive piece of work.

### AGRICULTURAL EXTENSION WORK STARTED

Though agricultural specialists had given some attention to Island problems several years earlier, nothing was done in an organized way until 1913. At that time the Agricultural Extension Service of Iowa State College helped organize the local Farm Bureau, and through it the aid of the Extension Service became available in an organized way to farmers in Muscatine County. In 1916 Muscatine County had the winning county exhibit at the Iowa State Fair. More than one-tenth of the total exhibits came from vegetable growers in Fruitland Township, which included much of Muscatine Island (fig. 1). Home project work was started in 1918, during the war emergency, as a part of the food conservation program.

During these early years of its development, the Extension Service recognized the seriousness of the problems facing Island agriculture and did some work each year to remedy them. Island problems, up to this time, were neither defined clearly enough nor presented persistently enough to command special attention from Island farmers, most of whom reacted indifferently to the program. Farm Bureau membership in Fruitland Township started with 6 in 1918, rose to 40 and to 46 in 1919 and 1920, while no members were reported by the county agent in 1921. From 1923 to 1925 Fruitland was the only township in the county for which the county agent reported no township meetings.

During this time sandland problems received increased attention. Three sandland farmers on the Island in 1921 cooperated in conducting tests with fertilizers for sweet potatoes. Measures for the control of diseases of corn and cabbage were put into practice in 1922. That year the county agent reported that truck crops work had been mostly on a service or non-project basis and that more definite projects were needed in truck crops extension work in the county. The state vegetable growers' association met in Muscatine in 1923, and during the same year work on alfalfa growing was started on the Island sandland.

Vegetable crops projects were extended in 1924 to include a fertilizer demonstration on irrigated sandland and the control of mosaic disease of cantaloupes. The projects to control

stem rot of sweet potatoes and cabbage yellows were continued. The control of watermelon wilt had, as yet, not been attempted systematically.

#### NEW ORGANIZATIONS DEVELOPED

While the reconstruction of Island agriculture had been under way for more than a decade, farm income, which had increased during the World War, declined below the pre-war level. In 1926, after three consecutive crop failures, vegetable growers in Muscatine County were spurred to concerted action. At the truck crops short course held that year in Conesville, a committee was appointed to request assistance from the Iowa Agricultural Experiment Station to reclaim thousands of acres from the ravages of plant diseases. The Conesville Experiment Association was organized by the local growers to sponsor and assist in this work. One year later, in 1927, a similar association of 30 members was organized on Muscatine Island, making it possible for Island farmers to co-operate with the College in conducting additional experiments. The state legislature made a special appropriation, which was followed by a similar appropriation in 1929, to continue the experimental work on vegetable crops.

A melon growers' association was organized in 1930 when 4,000 pounds of wilt-resistant melon seed was distributed. A similar amount was distributed in 1931, but little of this seed was planted on the Island.

The Muscatine Island Field Station was organized and began operation in 1931. The object of this branch of the Agricultural Experiment Station was to determine experimentally the varieties of vegetable crops most suited for Island farmers and to determine the most profitable methods for their production. This field station supplemented the plant-disease work of the station at Conesville, and both together offered a rather complete service for the development of Island agriculture and vegetable growers in Iowa.

#### NEW MARKETING PROBLEMS DEVELOPED

Development of good roads and the use of automobiles brought a new marketing problem to Island farmers. While these developments made it easier for growers to market their produce in the towns and cities in eastern Iowa and western Illinois, it also brought peddlers—small dealers who drove to the Island, purchased a load of produce direct from the growers and usually sold it direct to the consumer. Peddlers purchased their supplies as cheaply as possible. They took advantage of any price concessions, and growers found it difficult to maintain prices when they were told their neighbors



were selling for less. In the absence of trustworthy price information, growers were inclined to believe the peddlers. Confusion multiplied when, as frequently happened, growers who retailed their own produce found they must compete with peddlers who had purchased melons from their neighbors. Under such conditions the marketing process was demoralized. Neighbor often found himself arrayed against neighbor, either directly or indirectly, and under such conditions growers were unable to work together. Organized marketing was impossible, and, in the meantime, many growers received something less than fair market prices for their crops. Here unregulated competition returned to many growers a lower market price than other growers received in the same locality who had market information and were in a stronger bargaining position. Growers on the Island unanimously insisted that something must be done to improve the marketing situation, but they did not agree on any adequate solution.

#### SOCIAL ORGANIZATIONS DEVELOPED

During this period the church remained the only place where Island events could be held. Farm Bureau, Home Project, Community Club meetings and crop institutes all were held in the church. It was the privilege and the obligation of the church to lead the community in religious and social activities. Several conditions developed, however, which made it difficult for the church to do so: (1) The church appealed mostly to sandland farmers and few others attended; (2) the jealousies and animosities between neighbors made it impossible for them to work together to advantage in any organization; and (3) the church was controlled by a group who believed that the church was a place for worship only, and continuing their former policy, social activities were discouraged if they could not be considered part of a worship service. Thus other wholesome social activities, though greatly needed, were not developed.

The Ladies' Aid hall was established in Fruitland in 1926. Formerly a pool hall, it served as the center in Fruitland for the activities of the Ladies' Aid and for other organizations which met its approval. It was the only place in Fruitland where a public meeting could be held.

Misunderstanding continued, meanwhile, between church people and others on the Island. Those outside the church believed that it was trying to prevent the organization of all groups which were not church groups. Many church members believed that outsiders were principally interested in organizing either to injure the church directly or to promote activities which should not be allowed in a Christian community. These

beliefs, developed out of misconception and misunderstanding, became most important facts affecting organizations in the present situation. Conflict between groups on the Island increased and added to the difficulties of developing community cooperation and organization. The church has to accept its share of responsibility for this condition because it is the only organized group of major proportions and long standing on the Island. The church held the upper hand because it controlled the only community meeting place. During this period it was disposed to use this advantage to enforce its own position and either did not see, or chose to ignore, the opportunity for wider leadership.

### OTHER ORGANIZATIONS DEVELOPED

Increased sociability became the need of the hour, and ingenious methods were used to secure it. The I. C. C. Sunday School class, composed of 21 women mostly between the ages of 30 and 50 years, thought that too great a part of the Sunday school hour was spent in social visiting; therefore, in 1932 they organized the I. C. C. social club. This club was merely the Sunday school class operating as a social unit which conducted a well-arranged and quite successful social program each month. Without question it had the most experienced members and was the most successful social group on the Island. The club, essentially a church organization, seemed likely to become a permanent organization and offered a strong nucleus around which worthwhile community projects might develop.

The Cheerful Comrades Club, organized in 1933, was the most recently organized church social group. Teachers of the young men's and young women's classes arranged for a series of combined social parties held fortnightly at the homes of members. This group provided social activities for church young people between the ages of 15 and 22 years. Though they lacked experience, they displayed splendid possibilities for development. Under church supervision, this group had developed its capacity for social activities but had made no attempt to include other than Sunday school members. Future development of the Island community will depend upon the support of these young people.

These two social groups represented successful attempts by church people to provide social activities for their membership. While these groups had been limited in their activities, they held possibilities for continued development. The church had not attempted to furnish opportunity for social expression to non-members.

The Farm Bureau and the Agricultural Extension Service continued to encourage organization of Island farmers, but the results were irregular. In 1928 there were five pig club members in Fruitland Township. Home project work in Fruitland Township was established on an organized basis in 1923 and has been active since. A girls' 4-H Club, organized in 1926, had 11 members. This club lapsed for a time, but it was reorganized in 1931 and has functioned continuously since.

Membership in the Farm Bureau was intermittent and usually small on the Island, but the organization gained the approval of the leading farmers as the experimental and demonstration work with plant diseases, improved varieties and production practices began to show results. While these educational agencies had never been strongly supported by the rank and file of Island farmers, home project work and 4-H clubs had drawn their members from a wider area than any other Island organization, including the church.

A community club was organized in 1920; it met in the church and featured social, recreational, dramatic and literary programs of general interest. Occasionally a speaker would be invited to address the group. Usually 100 or more people attended each monthly meeting during the fall and winter. Collections were taken at the meetings to pay for refreshments, heat, light and janitor service. The club also paid for repairing the furnace and helped paint the church. In 1922 the club disbanded after friction developed over the control of the organization and the care of the church building. The club was reorganized in 1928, but disbanded in 1929. From 1929 to 1933 all groups were forbidden to eat refreshments in the church. Many Island families enjoyed the good times which, in their experience, were associated only with the community club. They did not believe, however, that the church was a suitable meeting place for such a group.

Two card clubs furnished good times for about a dozen families on the Island. Card playing was indulged in at club meetings, usually held monthly, but was subordinated to family visiting and group singing.

#### SUMMARY

Muscataine Island had passed through a period of early settlement with rather typical economic and social development featured by changes in type of farming accompanied by the rapid development of social organizations. Later, serious problems of agricultural production resulted in unprofitable farming and a sharp reduction in the number and effectiveness of organizations. As Fruitland declined, the church strengthened its dominant position. Island farmers were poorly ad-

justed to the tasks of making an adequate income on the land, of translating their resources into adequate living, and of organizing for the solution of their problems.

The aid of the State Agricultural Extension Service and the Experiment Station, which was applied locally through the Farm Bureau and the Muscatine Island Field Station, enabled farmers to begin work toward the solution of their production problems. Organizations, which began to solve farm problems by educational methods, were encouraged. Social organizations among church groups began to develop quite spontaneously in response to local needs.

### THE SURVEY OF PRESENT CONDITIONS

The number and complexity of the problems already presented indicate that the foregoing analysis did not furnish a sufficient basis on which to formulate a program for future development. Only through intimate knowledge of the people and the present conditions can Island people organize their resources for the solution of their problems. Additional facts are presented, therefore, to provide additional indications of the ways in which Island people may act to accomplish the reconstruction already begun.

### CONDITIONS AFFECTING ISLAND AGRICULTURE

Farmers on Muscatine Island were not generally prosperous. This unfavorable economic condition was reflected in the values of farm land and buildings in Fruitland Township.<sup>8</sup> Land on the Island was seldom valued at more than \$50 per acre, and much of the sandland ranged in price from \$10 to \$25 per acre. The limited need on the sandland for large barns and other buildings commonly found in a livestock country explained in part the low value of buildings per farm (table 2). Much of the difference was due to the low value of dwellings, particularly noticeable on the Island. The high water table generally made it impossible to have basements under houses, and lack of basements lowered the value of the houses and made it impossible to install a furnace. Blowing sand, lack of trees, blistering sun and lack of basements made it difficult to maintain dwellings in good repair. The lack of well painted buildings on the Island was generally noticeable. Much of the idle land was without buildings. The absence of livestock

<sup>8</sup> Farm land and buildings were not evaluated in this survey. Enough similarity exists between Muscatine Island and Fruitland Township so that significant comparison may be made (fig. 1). Such comparisons indicate certain differences which will also hold true for the Island. Differences shown here are less than the actual because the county includes the township and also because Fruitland Township, exclusive of the Island, is more like the county. Data for Fruitland Township and Muscatine County are from the United States Census of Agriculture, 1930.



made fences unnecessary. All of these conditions explain the low value of land and buildings.

### THE TWO TYPES OF ISLAND AGRICULTURE

While Island farmers had many things in common, agriculture on different parts of the Island could be characterized by its differences, which divided farmers on Muscatine Island noticeably into two separate groups. Two distinctive soil types were found on Muscatine Island (fig. 4). Wabash clay loam characterized the soils near the slough and on the southern part of the Island. Buckner fine sand or sandy loam characterized the soils in the central and northeastern sections of the Island. The soil on the west side of the slough was clay loam, but, being separated by the slough, the farmers on either side seldom contacted those living on the other. The clay loam was known as the heavyland and the other as the sandland. Locally this line of division was so marked that farmers were called either "heavylanders" or "sandlanders" according to the type of soil on which they lived and farmed (table 3).

Grain and livestock farming were commonly practiced on the heavyland soils. The principal crops were corn, wheat, rye, cowpeas and soybeans. Heavyland farmers constituted one-fifth of the number of farmers on the Island, but, because of their larger farms, they operated about one-third of the land in farms. Most of the problems of the heavyland farmers were similar to those of any grain and livestock farmer. Much of the heavyland, especially that on the southern end of the Island, needed drainage. At the present time all of the heavyland on the Island is included in the drainage district.

### SANDLANDS CHARACTERIZE THE ISLAND

Sandland farmers or "sandlanders" were concentrated in the north central part of the Island and included four-fifths of the farmers on the Island. Sandland farms were smaller, averaging 85.6 acres each—slightly more than half the size of the heavyland farms, which averaged 149.9 acres (table 1).

The principal crops on the sandland in 1933 were sweet potatoes, 1,092 acres; watermelons, 1,010 acres; cantaloupes, 872 acres; asparagus, 208 acres.<sup>9</sup> All of these were cash crops. Most of the farmers on the Island who lived within 2 or 3 miles of Muscatine, both "heavylanders" and "sandlanders," grew tomatoes, cabbage and cucumbers for the canning factories in Muscatine. Several farmers near the river front grew strawberries, fresh vegetables and small fruits, most of which were sold in Muscatine.

<sup>9</sup>Crop acreages from Economic Survey by Millard Peck. Department of Agricultural Economics, Iowa State College, 1933.

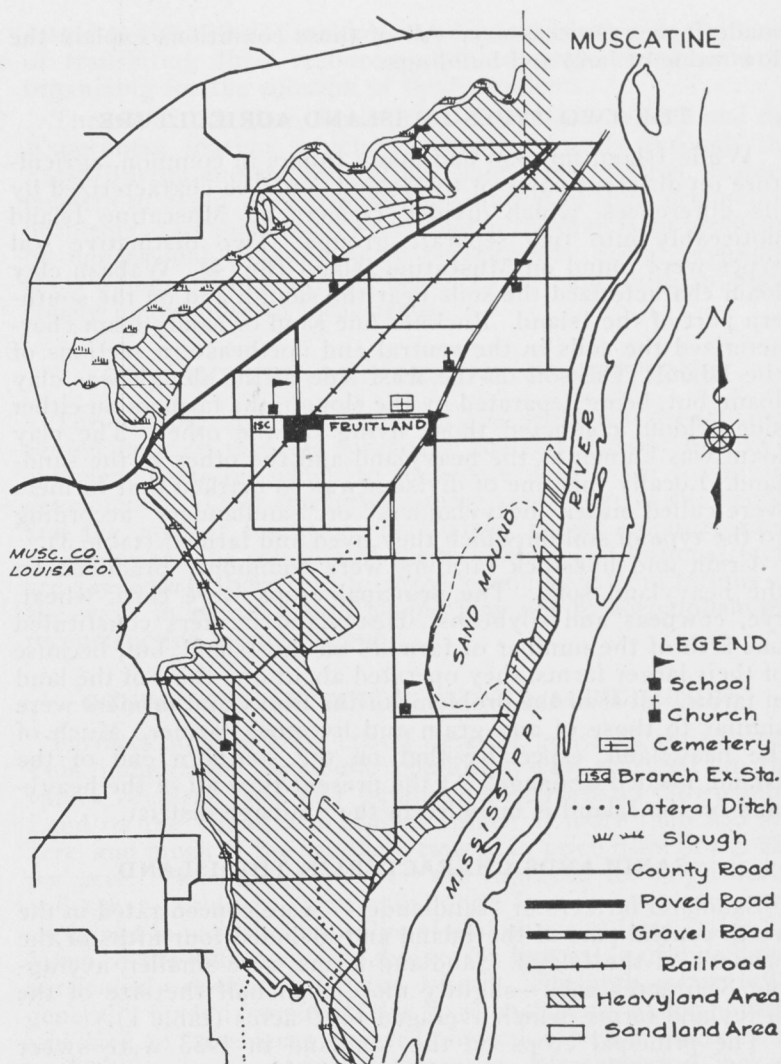


Fig. 4. Map of Muscatine Island showing location of heavyland and sandland. The central area of Muscatine Island is sandland with a border of loam or heavyland nearly surrounding it. The slough and the bluff west of the Island help to isolate it from the general farming country to the westward.

Livestock production was negligible on the sandland. Barns were small, horses were kept only for farm work, cows and pigs furnished milk and meat for home consumption, poultry furnished some cash income, but farm flocks were too small for specialized poultry and egg production.



TABLE 1. NUMBER OF FARMS, AVERAGE SIZE AND PERCENTAGE OF TENANCY.

| Item                       | Muscatine Island 1933 | Fruitland Township* | Muscatine County* |
|----------------------------|-----------------------|---------------------|-------------------|
| Number of farms.....       | 134                   | 125                 | 1,843             |
| Average size of farms..... | 98.6                  | 110.7               | 138.9             |
| Percentage of tenancy..... | 54.5                  | .....               | 45.6              |

\*Data from U. S. Census of Agriculture, 1930.

Muscatine Island and Fruitland Township were comparable in number and size of farms though only 100 Island farms were in Fruitland Township. Muscatine County farms were larger in size and had a smaller proportion of tenant operators.

Sandland farms, low in organic matter, required application of manure or commercial fertilizer. A dozen or more carloads of manure were unloaded annually at Fruitland in addition to the large amounts hauled by truck. Though only the more prosperous farmers used commercial fertilizer, approximately 500 tons were unloaded annually at Fruitland.

Sandland crops were benefited by irrigation made necessary by the lack of organic matter and by the gravelly subsoil. Irrigation was very exacting work and cost approximately \$10 per acre per year. Many farmers, including nearly all tenant farmers, did not irrigate, and their crop returns were relatively uncertain.

Conservation and replacement of organic matter were a major problem. Rye had been extensively used as a cover crop to keep soil from blowing during the winter, but it neither added sufficient organic matter nor markedly improved soil fertility. Various soil-building crops had been tried, and experiments have shown that it was most practical to restore and build Island soils by using cowpeas as green manure. This legume was grown extensively on the southern part of the sandland area but was commonly grown for hay or seed.

#### DRAINAGE DITCH STILL A PROBLEM

Drainage District No. 13, including land inside and outside Muscatine Island, was \$125,000 in debt at the time of the present survey (fig. 3). Only slightly more than half the land

TABLE 2. VALUES OF FARM LAND AND BUILDINGS.

| Item                         | Value per farm*    |                  | Value per acre*    |                  |
|------------------------------|--------------------|------------------|--------------------|------------------|
|                              | Fruitland Township | Muscatine County | Fruitland Township | Muscatine County |
| Farm land and buildings..... | \$9,232.64         | \$18,550.89      | \$83.42            | \$133.22         |
| All farm buildings.....      | 3,317.20           | 5,630.29         | 29.25              | 40.52            |
| Farm dwellings.....          | 1,395.60           | 2,583.27         | 12.61              | 18.60            |
| Farm land.....               | 5,515.40           | 12,920.30        | 53.46              | 93.00            |

\*Compiled from U. S. Census of Agriculture, 1930.

When land and building values per farm in Fruitland Township were compared with those in Muscatine County, the township values were from 25 to 60 percent lower per farm for each item considered. The greatest contrast was found in the comparison of farm land values.

TABLE 3. FARMS CLASSIFIED BY TYPE OF SOIL AND LOCATION.

| Type of soil    | Total farms |         | Location           |         |                      |         |
|-----------------|-------------|---------|--------------------|---------|----------------------|---------|
|                 |             |         | Fruitland Township |         | Port Louisa Township |         |
|                 | Number      | Percent | Number             | Percent | Number               | Percent |
| All farms ..... | 134         | 100     | 100                | 100     | 34                   | 100     |
| Sandland .....  | 107         | 79.9    | 80                 | 80      | 27                   | 79.4    |
| Heavyland ..... | 27          | 20.1    | 20                 | 20      | 7                    | 20.6    |

Sandland farming was most typical on Muscatine Island since four of every five farm operators were farming sandland soil. It was unnecessary to compare sandland and heavyland farmers by townships because the proportion of Island farmers on the sandland was the same in each township.

in the district was in crops, and one-third of the total area was classified as waste land.

Distress was especially evident in that part of the district which was in Louisa County, where from 25 to 58 percent of the taxes were delinquent each year from 1926 to 1933. This condition may be compared with a tax delinquency of 10 percent in the northern part of the district during the same period. A loan was obtained by the drainage district from the Reconstruction Finance Corporation in 1934 for slightly more than one-half the indebtedness, and the project was refinanced on this basis. While refinancing lightened the burden of debt somewhat, it did not remove it. At the time of this survey, farm owners reacted unfavorably to the drainage project. Five in six of the owner-operators, both "sandlanders" and "heavylanders," stated that in their opinion the drainage ditch was a hindrance rather than a help; one in three renters expressed the same opinion.

### IDLE LAND IS PREVALENT

An economic survey, made during the summer of 1933, showed that 4,544 acres of land on the Island were idle, neither tilled, cut for hay, nor pastured. This did not include land on which there were crop failures. Three-fourths of this idle land was tillable. That this is not an exceptional condition was indicated by the census figures which showed that idle land and crop failures in 1929 equaled one-third of the acreage of all crops harvested in Fruitland Township (table 4).

The reasons for this idle land, which is mostly sandland, are easy to find. Melon wilt, which still made the crop most uncertain on soil best adapted to it, was responsible for much of the idle sandland. Sweet potato production was increasing in importance and, with improved methods of production, supplemented melons as a satisfactory cash crop for the sandland. Drainage and irrigation problems increased the amount of idle land on the Island. Many farm homes, 12 of them during the

TABLE 4. PERCENTAGE OF FARM LANDS DEVOTED TO VARIOUS USES IN TOWNSHIP AND COUNTY.

| Type of land use*      | Muscatine County   |              | Louisa County        |              |
|------------------------|--------------------|--------------|----------------------|--------------|
|                        | Fruitland Township | Total County | Port Louisa Township | Total County |
| Crop land .....        | 67.4               | 62.7         | 69.2                 | 63.1         |
| Harvested .....        | 51.9               | 59.8         | 54.1                 | 59.1         |
| Failure .....          | 7.6                | 1.3          | 7.5                  | 2.4          |
| Idle .....             | 7.9                | 1.6          | 7.6                  | 1.6          |
| Plowable pasture ..... | 8.9                | 14.5         | 6.7                  | 13.2         |
| All other .....        | 23.7               | 22.8         | 24.1                 | 23.7         |
| Total .....            | 100.0              | 100.0        | 100.0                | 100.0        |

\*Compiled from data in the U. S. Census of Agriculture, 1930.

The percentage of farm land in broad types of use indicated no significant differences in land use either between Fruitland and Port Louisa townships or between Muscatine and Louisa counties (fig. 1). The uniqueness of land use problems in the two townships was evident when they were compared to the county. The most striking factors were the high percentage of crop failure, the high percentage of idle land and the low percentage of plowable pasture. Although the percentage of crop land was higher in Fruitland and Port Louisa townships, the percentage which was harvested was lower than for the counties as a whole.

5 years preceding this survey, were destroyed by fires, some of them by the grass fires which were a constant menace to Island farmers. These dwellings had not been replaced, and much of the land on these farms remained idle while the remaining buildings became dilapidated, and fields of weeds dotted the landscape. Idle sandland did not develop a sod quickly, and the growth of weeds gave large parts of the Island a general appearance of deterioration and abandonment.

The economic and social consequences of the idle land and the loss of nearly one-tenth of the farm homes during the past 5 years were quite obvious. These conditions reduced the support for organizations and contributed to a general attitude of dissatisfaction and discouragement.

#### ATTITUDE TOWARD COOPERATIVE MARKETING IS FAVORABLE

Marketing season on the Island was a time of feverish activity. Every farm was a market, piles of melons and canta-

TABLE 5. NUMBER AND PERCENTAGE OF OWNER AND TENANT OPERATORS OF FARMS.

| Tenure                 | Total farmers |         | Place of residence |         |                      |         |
|------------------------|---------------|---------|--------------------|---------|----------------------|---------|
|                        |               |         | Fruitland Township |         | Port Louisa Township |         |
|                        | Number        | Percent | Number             | Percent | Number               | Percent |
| All operators .....    | 134           | 100     | 100                | 100     | 34                   | 100     |
| Owner operators .....  | 61            | 45.5    | 49                 | 49      | 12                   | 35.3    |
| Tenant operators ..... | 73            | 54.5    | 51                 | 51      | 22                   | 64.7    |

Tenant operators were relatively more numerous on Muscatine Island than in either Muscatine or Louisa counties where, respectively, 46 percent and 48 percent of farm operators were tenants in 1930. Island tenants were relatively more numerous in Port Louisa Township.

loupes were displayed along the roadside, buyers got their supply, trucks came and went throughout the entire melon season.

Two points were generally agreed upon by Island farmers, especially by those on the sandland: (1) That the present marketing system was not working satisfactorily; (2) that outsiders did not understand Island marketing problems. With this last point in mind, an attempt was made to discover what Island farmers thought about cooperative marketing and some of the problems commonly associated with it. This was accomplished by means of a special questionnaire, the answers to which are summarized here.

Of the 134 farmers on the Island, 52, or 2 in 5, were favorable to cooperative marketing while 26, or 1 in 5, did not believe in it, and 15 were doubtful as to its value. The remaining 41, or 3 in 10, were indifferent or not interested in cooperative marketing. Most of those who were indifferent resided on the heavyland, did not grow melons or sweet potatoes and therefore were not interested in selling them. Island farmers living in Fruitland Township were more favorable to cooperative marketing than those who lived in Port Louisa Township. There was no difference between owner-operators and renters in their general opinion toward cooperative marketing.

When more specific questions were asked, the problem became somewhat more sharply defined. Only those farmers who had positive attitudes, either favorable or unfavorable, responded to the more detailed statements. Fifty-six farmers, mostly "sandlanders," expressed an opinion on the following statements. These farmers agreed, four in favor to one against, that cooperative marketing was right in principle; that local farmers should sell their produce through a cooperative marketing association; that they could get higher prices by so doing; that farmers did not need cooperative credit more than they needed cooperative marketing; and that cooperative associations should buy seed and other supplies for members.

On certain other questions the number who expressed an opinion was generally smaller, and no general agreement was reached. From these are presented the following statements: Every farmer should sell where he could make the most money; cooperative associations made farmers fight among themselves; marketing charges overbalanced gains made by cooperative selling. Three additional statements were answered decisively but in opposite ways by renters and owners, the total result therefore being indecisive. These three statements were: Times are so hard we must cooperate; cooperative marketing didn't succeed in actual practice; officials are the only ones in a cooperative who make any money. Renters answered each of these strongly in the affirmative,



while owner-operators answered them just as strongly in the negative.

Probably the most significant facts brought out by this analysis were: (1) The generally favorable opinion of the producers toward cooperative marketing; (2) the prevalence of certain prejudices and the lack of specific information on some problems of cooperatives; (3) the lack of interest or the high degree of doubt implied by the large number of persons who did not give an opinion. It seemed safe to conclude that much additional information was needed by Island farmers before they were likely to succeed in cooperative marketing.

#### AGENCIES FOR COMMUNICATION FEATURED BY GOOD ROADS

Roads formed the basis for most of the communication on the Island. Excepting a few miles of dirt roads near the slough, the entire Island was served by roads of sand or gravel (fig. 3). Only 10 families lived on dirt roads which ordinarily became impassable because of mud. New roads were sometimes made by driving across the idle, unfenced sandlands wherever desired, making a track which was easily followed thereafter.

A concrete highway, U. S. 61, crossed the Island diagonally from northeast to southwest and served as a convenient outlet to Muscatine and nearby cities (fig. 3). There were three bridges across the slough in addition to the one which carried highway No. 61. Each of them connected with dirt roads on either side of the slough. These roads were seldom used and were not important to the Island.

#### OTHER SERVICES FOR COMMUNICATION LESS IMPORTANT

Fruitland was, at the time of this survey, a flag stop on the Chicago, Rock Island and Pacific Railroad between Chicago and Kansas City. Because of this service the daily newspaper and other mail reached the Island promptly and was delivered from the local postoffice. Freight for the Island was handled through Muscatine and switched to the Fruitland siding. Passenger service was limited to local trains which stopped at Fruitland only when signaled. This station was less important than formerly and was not expected to attain its former importance.

Fruitland and Muscatine Island had exceptionally quick mail delivery service. In addition to an afternoon mail train operating each way daily, mail was brought directly by star route from Muscatine in the morning and from Washington, Iowa, in the evening.



The Fruitland Postoffice served approximately 200 families, of which 160 were served by a rural route 33 miles in length<sup>10</sup> (fig. 5). Families in and near the hamlet received their mail at the office. A rural mail route from Muscatine crossed the northern end of the Island and delivered mail to 14 Island families. With the exception of a few families located on the heavyland on the southern end of the Island along the slough, rural mail delivery was convenient for all Island farmers. During the spring months the Fruitland Postoffice handled numerous parcel post shipments of sweet potato plants for growers in all parts of the United States.

Telephones were relatively few on the Island when compared with Muscatine County or with the state of Iowa (table 12) (fig. 9). The proportion of telephones was higher for farmers than for non-farmers. Farm owners ranked highest, slightly more than half of them having telephone service. Families in the hamlet of Fruitland ranked lowest with one family in six having a telephone.

The nature of the sandland farmer's business made a telephone a valuable asset, especially during the marketing season. The Bell Telephone System furnished service direct to the Island through its exchange in Muscatine. The monthly cost to subscribers was high enough so that Island families felt they could not afford a telephone. Many telephones were discontinued just previous to the time of this study. Under such circumstances the telephone did not satisfactorily serve its usual function as an agency for dispensing local news and for social and business contact.

Automobiles were the common mode of transportation (fig. 9). Island farmers ranked above the county and the state in the proportion of farmers operating automobiles (table 12). Non-farm families on the Island ranked lower than farm families, and farm renters ranked higher than owner-operators.

The automobile, which could be useful in bringing people together, in reality, made it easier for Island residents to go elsewhere to shop and for social activities. This would continue as long as social activities on the Island were missing or less attractive than those found elsewhere.

Radio sets on the Island were relatively numerous (fig. 9). The proportion for Island farmers was nearly one-third higher than for the county and for the state. Owner families ranked above renters in the proportion owning radios, while farm families ranked above non-farm families.

Practically every radio set on the Island was operated by batteries, and consequently the cost of upkeep was high. Many

<sup>10</sup>In the fall of 1934 the Fruitland rural route was discontinued and the rural route from Muscatine was extended to cover the Island.

of the sets were not in operation because of the cost of operating them and because of the low returns from farming. Many of these sets were purchased from the former operator of a local broadcasting station who made vigorous and popular appeals to farm audiences and who sold them serviceable radio sets at low prices. Though no quantitative tests were made, it was evident to the authors that the speeches and writings of this broadcaster had measurably influenced the opinions of the people living on the Island.

The Muscatine Journal, a daily newspaper published in the afternoon, was delivered in Fruitland the same evening and reached the farmers by rural delivery the following morning. This paper carried news gathered by Island correspondents which made it attractive to Island people.

### CHARACTERISTICS OF THE POPULATION

Population data are presented for the 169 families interviewed. Only one family living on the Island at the time of the survey refused to give information. Of the total of 727 persons, 595 in 134 families lived on farms and 132 persons in 35 families lived in the hamlet or in the open country but did not operate a farm (table 7). The composition of the open country population not living on farms was more nearly like the non-farming population of the hamlet. Since the numbers were small, the hamlet and other non-farm populations are included together as non-farm population.

Approximately one-third of the families on the Island were of German descent and the rest of English extraction. Less than 1 in 10 of the male heads of families were foreign-born, while 1 in 20 of their wives were foreign-born (table 6). Half of the foreign-born had lived on the Island more than 25 years, and only 1 foreign-born operator was a renter. None of the foreign-born operators had lived less than 7 years on the farm

TABLE 6. HEADS OF FAMILIES AND WIVES CLASSIFIED ACCORDING TO PLACE OF BIRTH

| Locality in which born                    | Rural farm family |              |             |              | Rural non-farm family |              |             |              |
|---|-------------------|--------------|-------------|--------------|-----------------------|--------------|-------------|--------------|
|   | Head              |              | Wife        |              | Head                  |              | Wife        |              |
|   | Num-<br>ber       | Per-<br>cent | Num-<br>ber | Per-<br>cent | Num-<br>ber           | Per-<br>cent | Num-<br>ber | Per-<br>cent |
| Muscatine Island .....                    | 31                | 23.1         | 11          | 9.2          | 5                     | 14.3         | 4           | 13.8         |
| Muscatine Co., other than<br>island ..... | 9                 | 6.7          | 10          | 8.4          | 2                     | 5.7          | 4           | 13.8         |
| Other Iowa counties .....                 | 51                | 38.1         | 54          | 45.4         | 20                    | 57.1         | 17          | 58.6         |
| Other states .....                        | 30                | 22.4         | 37          | 31.1         | 8                     | 22.9         | 4           | 13.8         |
| Foreign countries .....                   | 13                | 9.7          | 7           | 5.9          |                       |              |             |              |
| Total .....                               | 134               | 100.0        | 119         | 100.0        | 35                    | 100.0        | 29          | 100.0        |

Most Muscatine Island farmers and their wives were not born on the island or in Muscatine County. Farmers born on Muscatine Island usually married someone not born on the island. Heads of non-farm families married persons who lived nearer home.

TABLE 7. AGE DISTRIBUTION OF THE ISLAND POPULATION.

| Age in years | Island population |          |            |            | Rural farm population |          |            |            | Non-farm population |          |            |            |
|--------------|-------------------|----------|------------|------------|-----------------------|----------|------------|------------|---------------------|----------|------------|------------|
|              | Total             |          | M per cent | F per cent | Total                 |          | M per cent | F per cent | Total               |          | M per cent | F per cent |
|              | Num-ber           | Per-cent |            |            | Num-ber               | Per-cent |            |            | Num-ber             | Per-cent |            |            |
| 0-4          | 75                | 10.3     | 5.6        | 4.7        | 56                    | 9.4      | 5.0        | 4.4        | 19                  | 14.3     | 8.3        | 6.1        |
| 5-9          | 65                | 8.9      | 5.1        | 3.9        | 57                    | 9.6      | 5.5        | 4.0        | 8                   | 6.1      | 3.0        | 3.0        |
| 10-14        | 91                | 12.5     | 6.2        | 6.3        | 74                    | 12.4     | 6.1        | 6.4        | 17                  | 12.8     | 6.9        | 6.1        |
| 15-19        | 90                | 12.3     | 7.8        | 4.5        | 71                    | 11.9     | 7.6        | 4.4        | 19                  | 14.3     | 9.1        | 5.3        |
| 0-19         | 321               | 44.1     | 24.7       | 19.4       | 258                   | 43.3     | 24.2       | 19.2       | 63                  | 47.5     | 27.3       | 20.5       |
| 20-24        | 38                | 5.2      | 3.0        | 2.2        | 35                    | 5.9      | 3.5        | 2.3        | 3                   | 2.3      | .8         | 1.5        |
| 25-29        | 33                | 4.5      | 1.9        | 2.6        | 27                    | 4.6      | 2.0        | 2.5        | 6                   | 4.5      | 1.5        | 3.0        |
| 30-34        | 53                | 7.3      | 3.2        | 4.1        | 42                    | 7.1      | 2.9        | 4.2        | 11                  | 8.3      | 4.5        | 3.8        |
| 35-39        | 57                | 7.8      | 4.1        | 3.7        | 48                    | 7.7      | 4.4        | 3.7        | 9                   | 6.9      | 3.0        | 3.8        |
| 40-44        | 47                | 6.5      | 3.6        | 2.9        | 35                    | 5.9      | 3.4        | 2.5        | 12                  | 9.1      | 4.5        | 4.5        |
| 20-44        | 228               | 31.3     | 15.8       | 15.6       | 187                   | 31.2     | 16.2       | 15.2       | 41                  | 31.2     | 14.3       | 16.6       |
| 45-49        | 38                | 5.2      | 2.8        | 2.5        | 30                    | 5.0      | 3.3        | 2.7        | 8                   | 6.1      | 4.5        | 1.5        |
| 50-54        | 36                | 4.9      | 2.8        | 2.2        | 32                    | 5.4      | 3.0        | 2.3        | 4                   | 5.0      | 1.5        | 1.5        |
| 55-59        | 23                | 3.2      | 1.7        | 1.5        | 20                    | 3.4      | 1.7        | 1.7        | 3                   | 2.3      | 1.5        | .8         |
| 60-64        | 25                | 3.4      | 2.3        | 1.1        | 21                    | 3.5      | 2.5        | 1.0        | 4                   | 3.0      | 1.5        | 1.5        |
| 45-64        | 122               | 16.7     | 9.6        | 7.3        | 103                   | 17.3     | 9.5        | 7.7        | 19                  | 14.4     | 9.0        | 5.3        |
| 65-69        | 21                | 2.9      | 1.7        | 1.2        | 18                    | 3.0      | 1.5        | 1.5        | 3                   | 2.3      | 2.3        | .....      |
| 70-74        | 18                | 2.5      | 1.2        | 1.2        | 17                    | 2.9      | 1.3        | 1.5        | 1                   | .8       | .8         | .....      |
| 75-79        | 12                | 1.7      | 1.1        | .6         | 9                     | 1.5      | 1.2        | .3         | 3                   | 2.3      | .8         | 1.5        |
| 80-84        | 3                 | .4       | .3         | .1         | 2                     | .3       | .2         | .2         | 1                   | .8       | .8         | .....      |
| 85-89        | 2                 | .3       | .1         | .1         | 1                     | .2       | .2         | .....      | 1                   | .8       | .....      | .8         |
| 65-          | 56                | 7.7      | 4.4        | 3.2        | 47                    | 7.9      | 4.4        | 3.5        | 9                   | 7.0      | 4.7        | 2.3        |
| Total        | 727               | 99.9     | 54.5       | 45.4       | 595                   | 99.9     | 54.3       | 54.3       | 132                 | 100.0    | 55.3       | 44.7       |

The population of Muscatine Island was characterized by a large proportion of persons under 20 years of age and by the small proportion in the 20-29 year class. The non-farm population was slightly younger than the farm population. Males predominated in numbers in both farm and non-farm population.

on which he was then located. Thus the foreign-born were mostly past 45 years of age and constituted a very stable element in the population.

The entire population of the Island was 54.5 percent male and 45.5 percent female, or 119 males to each 100 females (table 7). The sex ratio for the farming population approximated the average; the population of the hamlet had a sex ratio of 155 males to 100 females while other non-farm population had 108 males per 100 females.

The preponderance of males was found in nearly all ages (fig. 6). The facts that females leave rural areas at an earlier age than the men and that comparatively few opportunities for employment of females existed in the community might explain most of the differences in the older ages. But to these another factor must be added because the preponderance of males was also found in the part of the population under 15 years of age. Since children do not leave home so young, it was evident that a smaller number of female children have been born on the Island in proportion to the number of males. When all children born to families at present on the Island are considered, 54.9 percent are male and 45.1 percent are female.<sup>11</sup>

<sup>11</sup>It must not be argued from the above statements, however, that the ratio of males to females in the population over 20 years of age on the Island was biologically determined. Whatever the ratio of males to females at birth it seemed probable that enough more females would have left the Island to make the sex ratio in the age groups above 20 years of age approximately what it was in 1933.

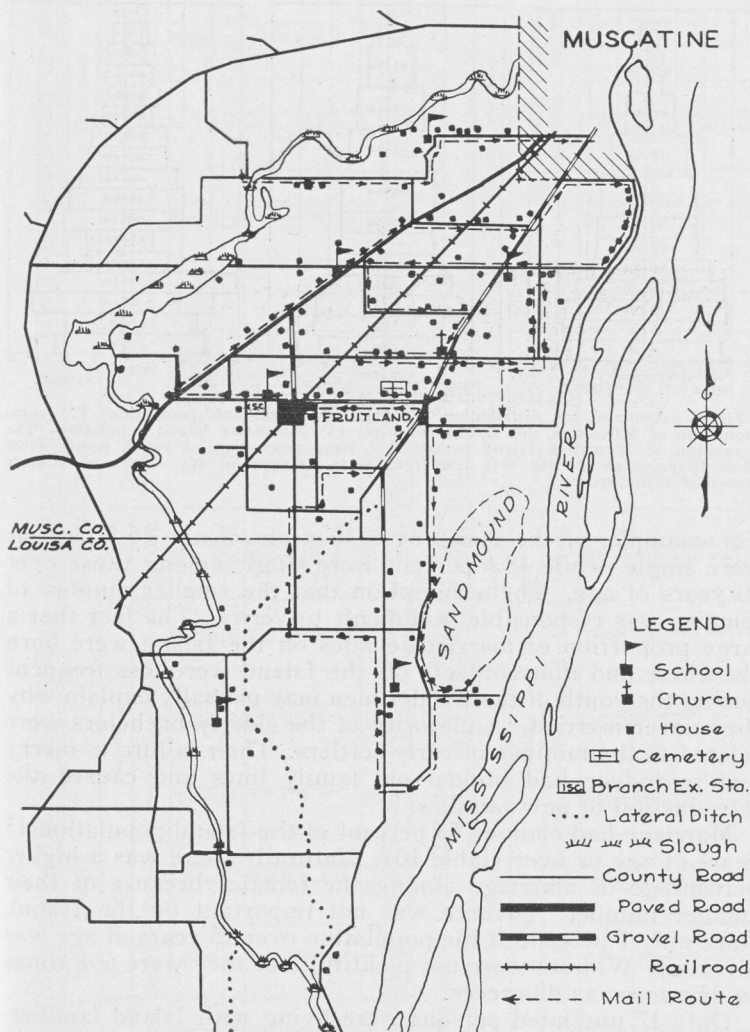


Fig. 5. Map of Muscatine Island showing location of homes. Rural mail delivery routes passed directly by most of the homes on the sandland. A large proportion of heavyland farmers on the Island lived a mile or more from the rural delivery route.

A striking factor in the preponderance of males was the relatively large number of bachelors, especially in the hamlet where there were several bachelors but only one widow and one other unmarried female, and in the farm population there was also a high percentage of older men who were unmarried.



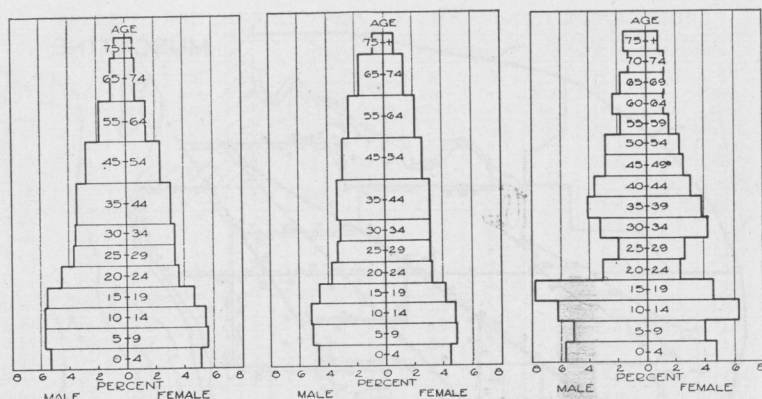


Fig. 6. Age and sex distribution of: (1) Iowa rural-farm population; (2) rural population of Muscatine and Louisa counties; (3) Muscatine Island population. The population of Muscatine Island contained a large proportion of young people from 10 to 19 years of age but very few from 20 to 29 years of age. Males were more numerous than females.

For example, of the males over 40 years of age 15.5 percent were single, while 18.8 percent were single among those over 50 years of age. The assumption that the smaller number of females was responsible is difficult to verify. The fact that a large proportion of married females on the Island were born elsewhere and that contacts off the Island were less frequent during the youth of these older men may partially explain why they never married. A majority of the elderly bachelors were related to the families of early settlers. Their failure to marry and reproduce had broken old family lines and caused the introduction of new families.

Marriage had claimed 63 percent of the Island population 15 years of age or over (table 10). Naturally there was a higher percentage of marriage among the females because of their smaller number. Divorce was not important on the Island, since only 1 percent of the population over 15 years of age was divorced. Widows were not plentiful, but they were five times as numerous as divorcees.

Only 17 unrelated persons were living with Island families. The average size of the families on the Island was 4.2, while the average size of the households was 4.3 persons.<sup>12</sup> Hamlet families, somewhat smaller, averaged 3.2 persons, partly because heads of families in the hamlet were older and many of the children had left home.

Natural families averaged 4.7 persons per family. Farm families averaged 4.8 persons and non-farm families averaged 4.2 persons per natural family. Of all families, 19.5 percent

<sup>12</sup>The definitions of family and household were taken from the U. S. Census, 1930.



TABLE 8. FARM OPERATORS CLASSIFIED BY THE NUMBER OF YEARS THEY HAD LIVED ON MUSCATINE ISLAND.

| Years on the Island | Island farmers |         |        |         |        |         | In Fruitland Township |         |               |                | In Port Louisa Township |         |               |                |
|---------------------|----------------|---------|--------|---------|--------|---------|-----------------------|---------|---------------|----------------|-------------------------|---------|---------------|----------------|
|                     | Total          |         | Owner  |         | Renter |         | Total                 |         | Owner percent | Renter percent | Total                   |         | Owner percent | Renter percent |
|                     | Number         | Percent | Number | Percent | Number | Percent | Number                | Percent |               |                | Number                  | Percent |               |                |
| Under 2.....        | 7              | 5.2     | ---    | ---     | 7      | 9.6     | 6                     | 6.0     | -----         | 11.7           | 1                       | 3.0     | -----         | 4.5            |
| 2-4.....            | 18             | 13.4    | 2      | 3.3     | 16     | 21.9    | 10                    | 10.0    | -----         | 19.6           | 8                       | 23.6    | 16.6          | 27.2           |
| 5-9.....            | 18             | 13.4    | 5      | 8.2     | 13     | 18.0    | 12                    | 12.0    | 10.2          | 13.7           | 6                       | 17.4    | -----         | 27.2           |
| 10-19.....          | 43             | 32.0    | 7      | 11.5    | 36     | 49.5    | 28                    | 28.0    | 10.2          | 45.0           | 15                      | 44.0    | 16.6          | 58.9           |
| 20-29.....          | 17             | 12.6    | 8      | 13.1    | 9      | 12.3    | 13                    | 13.0    | 14.3          | 11.7           | 4                       | 11.8    | 8.3           | 13.6           |
| 30-39.....          | 19             | 14.2    | 11     | 18.0    | 8      | 10.9    | 17                    | 17.0    | 22.4          | 11.7           | 2                       | 5.9     | -----         | 9.1            |
| 40-49.....          | 15             | 11.2    | 6      | 9.9     | 9      | 12.3    | 11                    | 11.0    | 8.2           | 13.7           | 4                       | 11.8    | 16.6          | 9.1            |
| 50-59.....          | 18             | 13.4    | 10     | 16.4    | 8      | 10.9    | 16                    | 16.0    | 18.3          | 13.7           | 2                       | 5.9     | 8.3           | 4.5            |
| 60-69.....          | 9              | 6.7     | 7      | 11.4    | 2      | 2.7     | 6                     | 6.0     | 10.2          | 1.9            | 3                       | 8.8     | 16.6          | 4.5            |
| 70-79.....          | 11             | 8.2     | 10     | 16.4    | 1      | 1.3     | 9                     | 9.0     | 16.3          | 1.9            | 2                       | 5.9     | 16.6          | -----          |
| 10-79.....          | 2              | 1.4     | 2      | 3.3     | ---    | -----   | ---                   | -----   | -----         | -----          | 2                       | 5.9     | 16.6          | -----          |
|                     | 91             | 68.0    | 54     | 88.5    | 37     | 50.5    | 72                    | 72.0    | 89.8          | 55.0           | 19                      | 56.0    | 83.4          | 41.1           |

Measured by the number of years Muscatine Island farmers had lived on the Island, owners in Fruitland Township were least mobile and renters in Port Louisa Township showed greatest mobility. One-third of all Island farmers moved to the Island during the decade, 1924 to 1933, inclusive.

TABLE 9. FARM OPERATORS CLASSIFIED BY THE NUMBER OF YEARS THEY HAD LIVED ON THE FARM THEY OPERATED AT THE TIME OF THE SURVEY.

| Years on same farm | Island farmers |         |        |         |        |         | In Fruitland Township |         |               |                | In Port Louisa Township |         |               |                |
|--------------------|----------------|---------|--------|---------|--------|---------|-----------------------|---------|---------------|----------------|-------------------------|---------|---------------|----------------|
|                    | Total          |         | Owner  |         | Renter |         | Total                 |         | Owner percent | Renter percent | Total                   |         | Owner percent | Renter percent |
|                    | Number         | Percent | Number | Percent | Number | Percent | Number                | Percent |               |                | Number                  | Percent |               |                |
| Under 2.....       | 24             | 17.9    | 4      | 6.6     | 20     | 27.4    | 18                    | 18.0    | 8.2           | 27.4           | 6                       | 17.6    | -----         | 27.3           |
| 2-4.....           | 31             | 23.1    | 5      | 8.2     | 26     | 35.6    | 19                    | 19.0    | 4.1           | 33.3           | 12                      | 35.3    | 25.0          | 40.9           |
| 5-9.....           | 22             | 16.4    | 11     | 18.0    | 11     | 15.1    | 17                    | 17.0    | 22.4          | 11.7           | 5                       | 14.7    | -----         | 22.7           |
| 10-19.....         | 77             | 57.4    | 20     | 32.8    | 57     | 78.1    | 54                    | 54.0    | 34.7          | 72.4           | 23                      | 77.6    | 25.0          | 89.9           |
| 20-29.....         | 21             | 15.7    | 11     | 18.0    | 10     | 13.7    | 19                    | 19.0    | 20.4          | 17.6           | 2                       | 5.8     | 8.3           | 4.5            |
| 30-39.....         | 14             | 10.4    | 12     | 19.6    | 2      | 2.7     | 12                    | 12.0    | 20.4          | 3.9            | 2                       | 5.8     | 16.6          | -----          |
| 40-49.....         | 11             | 8.2     | 9      | 14.7    | 2      | 2.7     | 7                     | 7.0     | 12.2          | 2.0            | 4                       | 11.7    | 25.0          | 4.5            |
| 50-59.....         | 6              | 4.5     | 5      | 8.2     | 1      | 1.4     | 4                     | 4.0     | 6.1           | 2.0            | 2                       | 5.8     | 16.6          | -----          |
| 60-69.....         | 3              | 2.2     | 2      | 3.3     | 1      | 1.4     | 3                     | 3.0     | 4.1           | 2.0            | ---                     | -----   | -----         | -----          |
| 10-69.....         | 2              | 1.4     | 2      | 3.3     | ---    | -----   | 1                     | 1.0     | 2.0           | -----          | 1                       | 2.9     | 8.3           | -----          |
|                    | 57             | 42.6    | 41     | 67.2    | 16     | 21.9    | 46                    | 46.0    | 65.3          | 27.5           | 11                      | 32.3    | 75.0          | 10.0           |

Farm owner operators had lived on their present farms longer than the tenants, while farmers in Fruitland Township had lived on their farms longer than those in Port Louisa Township.

TABLE 10. THE MARITAL STATUS OF THE POPULATION OVER 15 YEARS OF AGE, CLASSIFIED BY SEX.

| Marital status  | Total population over 15 years of age |         |              |                | Rural farm population over 15 years of age |         |              |                |
|-----------------|---------------------------------------|---------|--------------|----------------|--|---------|--------------|----------------|
|                 | Number                                | Percent | Percent male | Percent female | Number                                     | Percent | Percent male | Percent female |
| Total .....     | 496                                   | 100.0   | 100.0        | 100.0          | 408  | 100.0   | 100.0        | 100.0          |
| Married .....   | 313                                   | 63.1    | 57.5         | 69.9           | 253  | 62.0    | 56.7         | 68.5           |
| Widowed .....   | 25                                    | 5.1     | 2.5          | 8.1            | 19   | 4.6     | 2.2          | 7.6            |
| Divorced .....  | 5                                     | 1.0     | 1.4          | .4             | 4  | .9      | 1.3          | .5             |
| Unmarried ..... | 153                                   | 30.8    | 38.4         | 21.5           | 132  | 32.3    | 39.7         | 23.4           |

More widows than widowers and fewer divorced females than divorced males characterized the Island population over 15 years of age. Nearly twice as high a proportion of unmarried males as of unmarried females indicated the disadvantage in seeking a wife on the Island.

had no children born to them at any time. Non-farm families were highest with 25.7 percent of the families childless, as compared with 17.9 percent of the farm families (table 11).

#### AGE DISTRIBUTION AND THE MIGRATION OF INDIVIDUALS

The age distribution of the population indicated that approximately half of the persons between 20 and 30 years of age had moved from the Island (table 7 and fig. 6). This migration of young people had been exceptionally heavy during the past 10 years, during which time at least 75 more persons between the ages of 20 and 28 years have left the Island than have moved to it. Most of these migrated between the ages of 20 and 25 years. Approximately half of the females who migrated, however, left the Island before they were 20 years of age.

The reasons for this migration, common to both the farm and the non-farm populations, were: (1) Large families which made it necessary for some members to leave home to secure work; (2) lack of employment on the Island because of the unsatisfactory return from farming and the almost complete absence of other employment; and (3) opportunities for employment in Muscatine, Davenport, or elsewhere which were comparatively numerous until 1930. Island young people had little opportunity for self-expression and development so long as they remained on the Island. Migration furnished the only suitable outlet for many of them, and they left home as soon as they could secure outside employment.

The results of this migration were important both economically and socially. Economically, when these persons left home the Island lost what it had cost to rear and educate them. This cost is conservatively estimated at \$100,000 or over. Also the Island lost these persons as they arrived at the peak of their productive ability. When estates were settled and children

from Island families who lived in other places received their share, the Island loss was increased still further. The importance of such situations was not minimized by the fact that these persons were unable to find employment on the Island.

Social effects of this migration were noted. The migration took place at the age when rural young people were learning to work together. Because so large a proportion of persons between the ages of 20 and 30 left the Island, organizations for older younger people were difficult to maintain, and leader-follower relationships formed at younger ages were broken. The gap between persons under 20 and persons over 40 was very noticeable in Island organizations.

The high proportion, one-fourth, of the total population between 10 and 19 years of age emphasized the necessity for activities for this age group. This appeared to be the most pressing social need on the Island at the time of the survey, and it was not being met.

Island organizations and Island programs were dominated by persons over 45 years of age. This was true, if for no other reason, because of the few persons between 20 and 30 years old.

Conservatism in social and economic affairs was encouraged by the age composition of the Island population. Young people who remained were not encouraged to develop their abilities and become leaders. The decadent condition of social and economic organizations and the inability of Island farmers to solve new and pressing problems of agricultural production and marketing could be attributed to the age of the population and to the social and economic control closely associated therewith.

#### FAMILY MOBILITY ALSO INDICATED

Most of the farmers on Muscatine Island had moved there. Only 23 percent of the farm operators on the Island were born there. With less than one-fourth of these farmers born on the Island, it is evident that older residents had been replaced by other families. Only 9.2 percent of the wives of operators were born on the Island.

No farm family on the Island had lived on the same farm for more than two generations. The average period of residence for Island families on their present farm was 13.1 years, and their residence on the Island averaged 26.1 years (table 8). These figures did not indicate the amount of movement, because some of the older residents had not moved during their lifetime. One in six Island farmers had resided at their present location for less than 1 year.

Of the 134 farm operators, nearly one-third had lived on the Island less than 10 years, while nearly three in five had lived

TABLE 11. FAMILIES CLASSIFIED ACCORDING TO RESIDENCE AND SIZE OF FAMILY.

| Residence               | Number of families | Average size of family | Natural families |                                    |                                  | Percent of childless families |
|-------------------------|--------------------|------------------------|------------------|------------------------------------|----------------------------------|-------------------------------|
|                         |                    |                        | Average size     | Average number of children at home | Percent with no children at home |                               |
| All families .....      | 169                | 4.2                    | 4.7              | 2.8                                | 5.9                              | 19.5                          |
| Farm families .....     | 134                | 4.3                    | 4.8              | 2.8                                | 5.9                              | 17.9                          |
| Non-farm families ..... | 35                 | 3.8                    | 4.2              | 2.7                                | 5.7                              | 25.7                          |

Farm families were larger than non-farm families on Muscatine Island, also a larger proportion of the non-farm families were childless.

on the same farm less than 10 years (table 9). Renters moved much more frequently than owners. Of the renters, one-half had resided on the Island less than 10 years, and four in five had lived less than 10 years on the farm where they are at

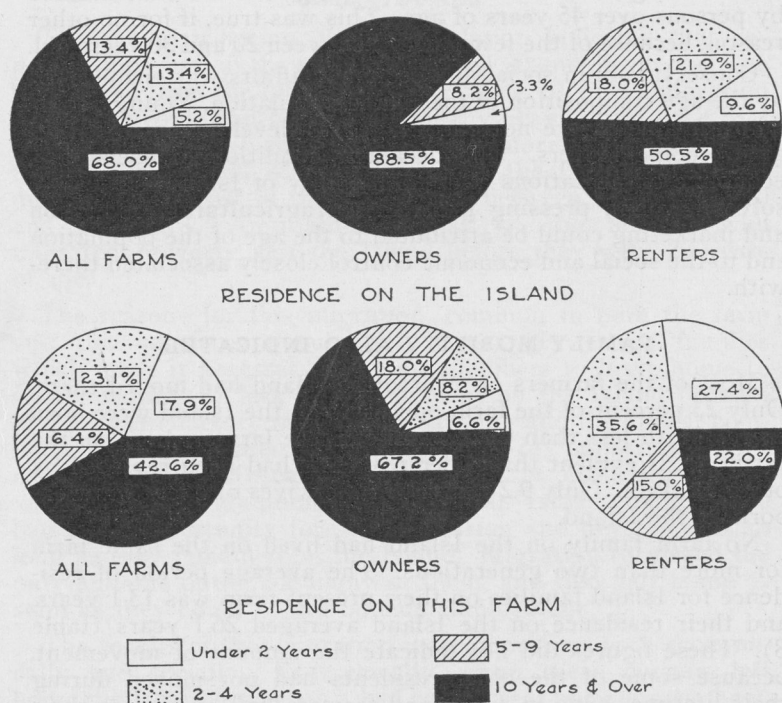


Fig. 7. Period of residence of owners and renters on the Island and on the farm now occupied. Farmers on Muscatine Island had lived on the Island longer than on their present farm. This was true for both owners and renters though renters moved much more frequently than owners.



present located (fig. 7). When the length of time is shortened to 5 years, movement seemed more noticeable; nearly one-third had lived on the Island less than 5 years, and 63 percent of the renters had lived on the same farm less than 5 years.

During the spring moving season on the Island in 1934, 40 families changed locations. Of these, 12 families moved off the Island, and 12 others moved on to take their places. Sixteen families moved from one place to another on the Island. Because 10 of the 12 families which moved away from the Island did not take any part in any Island organization during the time of this survey, it was evident that the migrants had not formed local attachments and were not assimilated by local organizations.

Movement of families from farm to farm on the Island constituted a serious problem for local organizations. Only 1 of the 16 families which moved from place to place on the Island had membership in any Island organization. The head of this family was an exception, a former owner who was compelled to move because he lost his farm through foreclosure. Families frequently moved from one farm to another because of inability to pay rent or other financial obligations. Such families were quite uninterested in Island organizations and did not assume either economic or social obligations in connection with them.

### FEW IMPROVED HOMES FOUND

The condition of the houses and the number of conveniences also reflected the unsatisfactory conditions in Island agriculture. Based on outside appearances, one in six of the houses was well-painted and well-kept (fig. 8). Nearly one-half were considered fair or average, and over one-third appeared shabby. There were a few homes on the Island where a shabby exterior was combined with the poorly furnished and disorderly interior which frequently accompanies a very low standard of living. At the other extreme were a few farm homes with

TABLE 12. PERCENTAGE OF FARM FAMILIES HAVING AUTOMOBILE, TELEPHONE AND RADIO ON MUSCATINE ISLAND AND IN OTHER AREAS.

| Item             | Percent of ownership by areas |                   |                |                |
|------------------|-------------------------------|-------------------|----------------|----------------|
|                  | Muscatine Island              | Muscatine County* | Louisa County* | State of Iowa* |
| Automobile ..... | 91.8                          | 88.6              | 86.1           | 90.2           |
| Telephone .....  | 42.5                          | 81.5              | 83.6           | 84.2           |
| Radio† .....     | 61.2                          | 47.7              | 45.4           | 47.8           |

\*Data for civil units were taken from U. S. Census of Agriculture, 1930.

†Data on radio for counties and state were taken from Iowa Yearbook of Agriculture, 1930.

Farmers on Muscatine Island had proportionally more radios, fewer telephones and slightly more automobiles than did all Iowa farmers or farmers in Muscatine and Louisa counties.



practically every modern convenience. Both these extremes constituted a minority, and the largest proportion of Island homes were in the middle class—clean, well-kept and as attractive as conditions permitted. Nearly all the houses on the Island had an adequate number of living and sleeping rooms (table 15). Only 1 family had less than .5 of a room per person, while 21 families had less than 1 room per person; of these, 17 were renters and 4 were owners.

Island homes were seriously lacking in modern conveniences and equipment (table 14). Less than one in six of all Island homes had electric lights (fig. 9). A municipal electric line from Muscatine extended to within a mile of Fruitland, and a line from Wapello extended northward through the hamlet to the Island church. Electric service was not available to most Island homes, and very few had individual electric plants. None of the schools had electric lights.

One house in 30 had piped hot and cold water, and 1 in 20 had a furnace (table 14). Lack of furnaces was caused in part

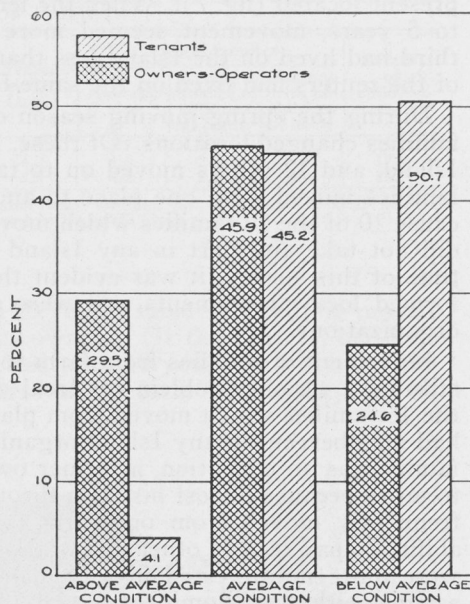


Fig. 8. Percentage of homes of owners and tenants classified by condition. The homes of owner-operators were more attractive than tenant homes. Owner-operators had a higher proportion of above average homes and a higher proportion of the tenants lived in below average homes.

TABLE 13. PERCENTAGE OF FAMILIES ON MUSCATINE ISLAND OWNING AUTOMOBILE, TELEPHONE AND RADIO, CLASSIFIED BY RESIDENCE.

| Locality               | Percent owning |           |       |
|------------------------|----------------|-----------|-------|
|                        | Automobile     | Telephone | Radio |
| All farm families..... | 91.8           | 42.5      | 61.2  |
| Owner-operators .....  | 90.1           | 55.7      | 67.2  |
| Renters .....          | 93.1           | 31.5      | 56.1  |
| Hamlet families .....  | 81.2           | 16.5      | 50.0  |
| Other non-farm .....   | 78.9           | 26.3      | 36.8  |

Wide variation was shown in the percentage of families having radio or telephone on Muscatine Island. More farm owners had telephone or radio while more renters had an automobile. Proportionately fewer hamlet dwellers and other non-farm families had a telephone or a radio.

TABLE 14. NUMBER AND PERCENTAGE OF FARM FAMILIES OWNING CERTAIN CONVENIENCES.

| Item                           | All farm families |         | Owner-operators |         | Renters |         |
|--------------------------------|-------------------|---------|-----------------|---------|---------|---------|
|                                | Number            | Percent | Number          | Percent | Number  | Percent |
| Number of farms.....           | 134               | 100.0   | 61              | 100.0   | 73      | 100.0   |
| Automobile .....               | 123               | 91.8    | 55              | 90.2    | 68      | 93.2    |
| Radio .....                    | 82                | 61.2    | 41              | 67.2    | 41      | 56.2    |
| Telephone .....                | 57                | 42.5    | 34              | 55.7    | 23      | 31.5    |
| Electricity .....              | 20                | 14.9    | 15              | 24.6    | 5       | 6.8     |
| Running water .....            | 5                 | 3.7     | 5               | 8.2     | 0       | .....   |
| Hand pump in house.....        | 89                | 66.4    | 41              | 67.2    | 48      | 65.8    |
| Piano .....                    | 45                | 33.6    | 23              | 37.7    | 22      | 30.1    |
| Organ .....                    | 10                | 7.5     | 3               | 4.9     | 7       | 9.6     |
| Other musical instruments..... | 29                | 21.6    | 11              | 18.0    | 18      | 24.7    |
| Furnace .....                  | 8                 | 6.0     | 7               | 11.5    | 1       | 1.4     |
| Bathroom .....                 | 7                 | 5.2     | 6               | 9.8     | 1       | 1.4     |

Owner-operators had more conveniences than did renters on Muscatine Island. More renters, however, had an automobile or a musical instrument.

by lack of basements, which was due in turn to the high water level. Island homes excelled in the number of homes with water pumped in the house by hand pumps, usually located in the kitchen. By driving a casing 25 to 50 feet into the sand, plenty of good water was assured. It was unusual for families to carry water. Island families depended upon kerosene lamps for illumination, washtubs for bath and stoves for heat.

Approximately half the homes were scored by means of the Chapin living room scale. The homes scored were representative of the entire community, and the results are dependable. The living room scores ranged from 17 to 145.5 with a mean score of 64.4 for the Island. The range was from 20 to 145.5 with a mean of 66.9 for farm homes. No significant differences were found between the living room scores of farm homes and non-farm homes (table 15).

### OWNERS HAVE MORE CONVENIENCES THAN RENTERS

When farm renters were compared with farm owners, significant differences arose (table 15). Renters had fewer rooms per person, fewer conveniences and lower living room scores. The difference between the averages for living room scores, 9.2, was very significant, but not so significant statistically as

TABLE 15. NUMBER OF ROOMS, CONVENIENCES AND LIVING ROOM SCORES OF FARM FAMILIES.

| Item                         | Owner-operators | Renters |
|------------------------------|-----------------|---------|
| Rooms per person .....       | 2.2             | 1.4     |
| Conveniences per family..... | 3.9             | 2.5     |
| Living room score*.....      | 72.1            | 62.9    |

\*Living rooms of 29 owners and 49 renters were scored.

Owner-operators had more rooms per person, more conveniences and a higher living room score than did the renters.

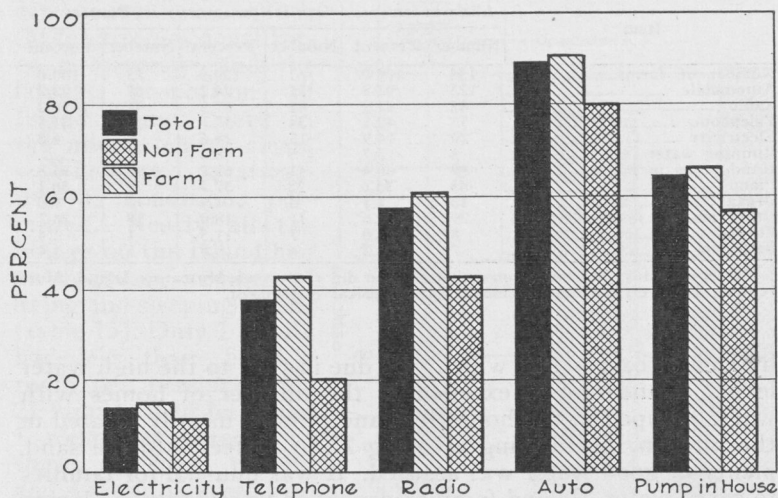


Fig. 9. Percentage of homes having various conveniences. The automobile was the convenience most commonly owned on the Island. Farmers showed a higher proportion of families owning conveniences than did the non-farmers.

the difference in number of rooms per person or the number of conveniences.<sup>13</sup>

No significant relation was found between the number of persons in the household and the number of rooms in the house, nor between the number of rooms per person and the number of conveniences found or the living room score. The correlation between the number of conveniences and the living room score, .5013 for 49 renter families and .6849 for 29 owner families, was significant both for owners and renters. The difference in the size of the correlation for owner and renter families was not significant in this instance. Differences between heavyland farmers and sandland farmers in number and kind of conveniences were not important.

Expenditures by all Island families for health and medical care were small. Estimates were low because only in case of serious or prolonged sickness could the investigator find knowledge of actual expenditures. It seemed clear, however, that if the amounts spent for confinement cases were sub-

<sup>13</sup>The significance of the living room score was nullified somewhat in a few instances because the family lived in the kitchen or other rooms during winter months and closed the living room.

tracted from the total, the average per family expenditure reported for health and medical care was negligible in amount.

#### FEW FAMILIES WERE ON RELIEF

Twenty families of the 175 living in Fruitland Township received relief, ranging in amount from \$2 to \$20 per month during the winter of 1933. Most of these families lived near Muscatine or in the tenant houses near the commercial green-houses located on the north end of the Island. Some were idle during the winter and worked during the summer for wages which were not large enough to encourage sufficient saving for winter expenses. Only six families in the sandland area received relief, and only three of these were farm families. Two of the farm families were located in Fruitland Township and one in Port Louisa Township. With economic conditions in turmoil and crop returns uncertain, the small number of farm families on relief deserved special mention.

#### ELEMENTARY EDUCATION WAS CHARACTERISTIC

Elementary schools gave all the education obtained by nearly three-fourths of the Island population 15 or more years of age. All had attended school, but 5 percent had not passed fourth grade (table 16). Ten percent had received some education above grade school, less than 1 in 25 had attended college, and none had been graduated from college. The education received by heads of families on the Island showed more variation than that received by the total population (table 17). The wives of heads of families were better educated than their husbands. Owner-operators had more education than renters (table 18).

Island people believe in education. Seven one-room schools were on the Island, five in Fruitland Township and two in Port Louisa Township. The average enrollment per school on the Island was 25 pupils and the average daily attendance 17. The number of pupils enrolled ranged from 12 to 47. Both the smallest and the largest enrollments were in Port Louisa Township where one of the schools was housed in a smaller building and served pupils living near the lower end of the slough.

Teachers' salaries ranged from \$40 to \$60 per month. Six teachers were female and one male; five of the seven did not live or stay on the Island. One teacher had taught the same school for 9 consecutive years, which was most unusual. The average tenure, including the 9-year stay, was 2.4 years. A majority of the teachers were in their first year of teaching in the school where they were then located. The school tax levy



TABLE 16. EXTENT OF SCHOOLING OF THE POPULATION OVER 15 YEARS OF AGE.

| Extent of education              | The Island |         |              |                | Rural farm |         |              |                | Rural non-farm |         |              |                |
|----------------------------------|------------|---------|--------------|----------------|------------|---------|--------------|----------------|----------------|---------|--------------|----------------|
|                                  | Total      |         | Male percent | Female percent | Total      |         | Male percent | Female percent | Total          |         | Male percent | Female percent |
|                                  | Number     | Percent |              |                | Number     | Percent |              |                | Number         | Percent |              |                |
| Total.....                       | 496        | 100.0   | 100.0        | 100.0          | 408        | 100.0   | 100.0        | 100.0          | 88             | 100.0   | 100.0        | 100.0          |
| Grades 1-4.....                  | 22         | 4.5     | 5.9          | 2.7            | 18         | 4.4     | 5.8          | 2.7            | 4              | 4.6     | 6.1          | 2.6            |
| Grades 5-8.....                  | 342        | 69.0    | 72.2         | 65.0           | 274        | 67.1    | 70.1         | 63.6           | 68             | 77.3    | 81.6         | 71.8           |
| Some high school.....            | 56         | 11.3    | 9.5          | 13.4           | 44         | 10.8    | 9.4          | 12.5           | 12             | 13.6    | 10.2         | 17.9           |
| Completed high school.....       | 20         | 4.0     | 3.7          | 4.5            | 20         | 4.9     | 4.5          | 4.5            | .....          | .....   | .....        | .....          |
| Some college.....                | 18         | 3.6     | 2.9          | 4.5            | 15         | 3.7     | 3.0          | 4.4            | 3              | 4.4     | 2.1          | 5.1            |
| Business or Normal Training..... | 18         | 3.6     | 2.9          | 4.5            | 17         | 4.2     | 3.6          | 4.9            | 1              | 1.1     | .....        | 2.6            |
| Foreign schools.....             | 20         | 4.0     | 2.9          | 5.4            | 20         | 4.9     | 3.6          | 6.5            | .....          | .....   | .....        | .....          |

Elementary education was characteristic of the Island population over 15 years of age. Few persons were educated beyond eighth grade, but farm people were more highly educated than non-farmers. Foreign schools attended were mostly elementary.

TABLE 19. THE DENOMINATIONAL AFFILIATION OF THE POPULATION OVER 15 YEARS OF AGE.

| Church denomination   | Island population |         |              |                | Rural farm population |         |              |                | Rural non-farm population |         |              |                |
|-----------------------|-------------------|---------|--------------|----------------|-----------------------|---------|--------------|----------------|---------------------------|---------|--------------|----------------|
|                       | Total             |         | Male percent | Female percent | Total                 |         | Male percent | Female percent | Total                     |         | Male percent | Female percent |
|                       | Number            | Percent |              |                | Number                | Percent |              |                | Number                    | Percent |              |                |
| Island Methodist..... | 88                | 17.8    | 15.8         | 20.2           | 73                    | 17.9    | 14.7         | 21.7           | 15                        | 17.1    | 20.4         | 12.8           |
| Other Methodist.....  | 74                | 14.9    | 12.5         | 17.9           | 62                    | 15.2    | 12.9         | 17.9           | 12                        | 13.6    | 10.2         | 17.9           |
| Lutheran.....         | 40                | 8.1     | 8.4          | 7.6            | 40                    | 9.8     | 10.3         | 9.2            | .....                     | .....   | .....        | .....          |
| Catholic.....         | 23                | 4.6     | 5.5          | 3.6            | 22                    | 5.4     | 6.7          | 3.8            | 1                         | 1.1     | .....        | 2.6            |
| Baptist.....          | 34                | 6.9     | 5.1          | 9.0            | 26                    | 6.4     | 5.4          | 7.6            | 8                         | 9.1     | 4.1          | 15.4           |
| Christian.....        | 9                 | 1.8     | 1.5          | 2.2            | 8                     | 2.0     | 1.8          | 2.2            | 1                         | 1.1     | .....        | 2.6            |
| Presbyterian.....     | 6                 | 1.2     | 1.7          | 1.8            | 6                     | 1.5     | 1.9          | 2.2            | .....                     | .....   | .....        | .....          |
| United Brethren.....  | 7                 | 1.4     | 1.1          | 7.8            | 7                     | 1.7     | 1.3          | 2.2            | .....                     | .....   | .....        | .....          |
| Others*.....          | 27                | 5.4     | 4.0          | 7.2            | 21                    | 5.1     | 3.6          | 7.1            | 6                         | 6.8     | 6.1          | 7.7            |
| No church.....        | 188               | 37.9    | 45.4         | 28.7           | 143                   | 35.0    | 42.4         | 26.1           | 45                        | 51.2    | 59.2         | 41.0           |
| Total.....            | 496               | 100.0   | 100.0        | 100.0          | 408                   | 100.0   | 100.0        | 100.0          | 88                        | 100.0   | 100.0        | 100.0          |

\*Denominations with less than five members are grouped under this heading.

Methodists predominated in the population over 15 years of age on Muscatine Island. The Island church enrolled slightly more than all other Methodist churches. Farmers belonged to the greater variety of denominations. More females than males belonged to some church, the difference between males and females being most marked in the farm population.



TABLE 17. THE EXTENT OF SCHOOLING OF THE HEADS OF FARM FAMILIES AND OF FARM WIVES.

| Extent of education               | The Island* |         |        |         | Rural farm   |              | Rural non-farm |              |
|-----------------------------------|-------------|---------|--------|---------|--------------|--------------|----------------|--------------|
|                                   | Head        |         | Wife   |         | Head percent | Wife percent | Head percent   | Wife percent |
|                                   | Number      | Percent | Number | Percent |              |              |                |              |
| Grades 1-4 .....                  | 16          | 9.5     | 6      | 4.1     | 10.5         | 4.2          | 5.7            | 3.5          |
| Grades 5-8 .....                  | 120         | 71.0    | 102    | 68.9    | 67.9         | 68.1         | 82.8           | 72.4         |
| Some high school .....            | 9           | 5.3     | 20     | 13.5    | 5.2          | 12.6         | 5.7            | 17.2         |
| Completed high school ..          | 6           | 3.6     | 3      | 2.0     | 3.7          | 2.5          | 2.9            | .....        |
| Some college ..                   | 2           | 1.2     | 4      | 2.7     | .8           | 1.7          | 2.9            | 6.9          |
| Business or Normal Training ..... | 9           | 5.3     | 7      | 4.7     | 6.7          | 5.9          | .....          | .....        |
| Foreign school ..                 | 7           | 4.1     | 6      | 4.1     | 5.2          | 5.0          | .....          | .....        |
| Total .....                       | 169         | 100.0   | 148    | 100.0   | 100.0        | 100.0        | 100.0          | 100.0        |

\*Thirteen male heads of families have no wife and eight heads of families are widows.

Heads of families on Muscatine Island were not so well educated as their wives. While a higher percentage of wives had attended high school, fewer had graduated. More farmers than non-farmers have had some business or normal training.

in Fruitland Township was reduced from 34 mills in 1930 to 27.6 mills in 1931. In 1933 it was further reduced to 13.6 mills.<sup>14</sup>

The chief educational handicap for Island young people was the fact that few of them attended high school. Tuitions paid by the school district, in this case the township, and even free transportation would not solve the real problem which was the lack of elementary education. In 1931, 1932 and 1933, 41 percent of the pupils who took eighth grade work passed the eighth grade examination prerequisite to high school entrance. Thus the majority of Island children found it practically impossible to enter high school under any circumstances at any time, and children were denied the superior educational advantages which Island farmers sought at the beginning of the century. Opportunities for out-of-school education on Muscatine Island were furnished by the home project work of the Farm Bureau and by the girls' 4-H club.

TABLE 18. THE EXTENT OF SCHOOLING OF FARM OWNERS AND RENTERS.

| Highest grade attained               | Owner-operators |         | Renters |         |
|--------------------------------------|-----------------|---------|---------|---------|
|                                      | Number          | Percent | Number  | Percent |
| One to six.....                      | 8               | 13.1    | 21      | 28.9    |
| Seven to eight.....                  | 41              | 67.2    | 42      | 57.5    |
| High school, two years or less....   | 2               | 3.3     | 2       | 2.7     |
| High school, three to four years.... | 3               | 4.9     | 5       | 6.8     |
| College .....                        | 0               | 0.0     | 1       | 1.4     |
| Normal or Business Training.....     | 7               | 11.5    | 2       | 2.7     |
| Total .....                          | 61              | 100.0   | 73      | 100.0   |

Farm owner-operators had attended school longer than renters on Muscatine Island. Owners excelled in normal and business training, while renters had a much larger number in grades one to six. Only 19.7 percent of owner-operators and 13.7 percent of the renters received schooling beyond eighth grade.

<sup>14</sup>From reports of the State Department of Education, Des Moines, Iowa.

## MEMBERSHIP IN ORGANIZATIONS

Island organizations were investigated especially to learn the membership of Island families in organized groups, the programs sponsored by various groups and the number of persons and families which participated in group activities. Attention was also given to differences in the participation of sandland and heavyland farmers and the part which organizations took in promoting improved farming and social life.

Churches led all organizations in membership, both on and off the Island (fig. 10). Slightly more than three in five Island people over 15 years of age claimed membership in some church (table 19). Half of these were Methodists; while Lutherans, Baptists and Catholics followed in the order named. Slightly more than half the Methodists, one-fourth of the total, belonged to the Island Church, while the other Methodists claimed membership elsewhere. Since the churches of all other denominations were located off the Island, over two-thirds of all the persons claiming church membership belonged to some church not on the Island. In many cases this merely meant that they belonged to some church at some former time. A minority of these families attended church in Muscatine, on the Island, or elsewhere. Most of those who belonged elsewhere were inactive in church work.<sup>15</sup>

Of all the Island families, 38 claimed no membership in any church for any member of the family (fig. 10). Seven in eight of the Island families had one or more members in some church. Slightly more than half the families had at least one member in some church elsewhere but had no members in the Island church. Nearly one in four of the families had one or more members in the Island church, while one family had members in the Island church and also in another church not on the Island.

A higher proportion of the female population belonged to the church. While slightly more than half the males over 15 years of age claimed church membership, nearly three-fourths of the females did. The proportion of church membership was higher among the families of farm operators than among the non-farm population. Nearly two-thirds of the farm population belonged to some church, while half the non-farm population claimed church membership.

Heads of families and their wives showed a higher proportion of church membership than did all persons over 15 years of age (tables 19 and 20). More wives than husbands belonged

<sup>15</sup>Because all official church records on the Island had been destroyed or lost previous to the time of this survey, it was impossible to check claimed membership against church records. After such local verification as could be secured the word of the person interviewed was accepted as final.

TABLE 20. THE DENOMINATIONAL AFFILIATION OF THE HEADS OF FAMILIES AND OF WIVES.

| Church denomination | Island families |         |        |         | Farm families |               | Non-farm families |               |
|---------------------|-----------------|---------|--------|---------|---------------|---------------|-------------------|---------------|
|                     | Head*           |         | Wives  |         | Head percent  | Wives percent | Head percent      | Wives percent |
|                     | Number          | Percent | Number | Percent |               |               |                   |               |
| Island Methodist    | 30              | 17.8    | 28     | 18.9    | 17.9          | 20.2          | 17.1              | 13.8          |
| Other Methodist     | 23              | 13.6    | 29     | 19.6    | 13.4          | 19.3          | 14.3              | 20.7          |
| Lutheran            | 17              | 10.1    | 13     | 8.8     | 12.7          | 10.9          | .....             | .....         |
| Catholic            | 8               | 4.7     | 7      | 4.7     | 6.0           | 5.0           | .....             | 3.5           |
| Baptist             | 11              | 6.5     | 12     | 8.1     | 6.0           | 7.6           | 8.6               | 10.3          |
| Christian           | 4               | 2.4     | 5      | 3.4     | 3.0           | 3.4           | .....             | 3.5           |
| Presbyterian        | 2               | 1.1     | 4      | 2.7     | 1.4           | 3.4           | .....             | .....         |
| Others†             | 8               | 4.7     | 11     | 7.4     | 4.5           | 6.4           | .....             | 10.3          |
| No church           | 66              | 39.1    | 39     | 26.4    | 35.1          | 23.5          | 54.3              | 37.9          |
| Total               | 169             | 100.0   | 148    | 100.0   | 100.0         | 100.0         | 100.0             | 100.0         |

\*Thirteen men have no wife and eight widows are family heads.

†Denominations with less than five members are grouped under this heading.

More wives than husbands were church members, also a larger proportion of farmers than non-farmers. Husbands and wives showed a slightly larger proportion of church membership than did the entire population over 15 years of age (table 19).

to church in both farm and non-farm families. The proportion of members was higher for farm operators and their wives than for the heads of non-farm families and their wives.

#### MEMBERSHIP IN THE ISLAND CHURCH

Membership in the Island church consisted of 88 persons, 43 male and 45 female, an average of 2.2 members per family (table 19). The members represented 40 families, and the heads of 30 of these families belonged to some church (table 20). While the membership included one or more persons from 40 percent of the families on the Island, it included only 17.8 percent of the persons over 15 years of age and a like proportion of the heads of families on the Island.

The Island church was one of three Methodist Episcopal churches served by a minister who lived in South Muscatine. This minister divided his time between the three widely divergent congregations, one a city church, one an open country church composed of livestock farmers and the Island church, which was composed almost entirely of sandland farmers. Since the Island church was the minor charge in this circuit and contributed only \$300 to the minister's salary, it received a minor share of the minister's time and attention. Church worship was held at 9:30 a. m. on Sunday during the winter and at 11:00 a. m. during the summer to enable the minister to meet his other appointments. This time of meeting during the winter months was too early for heavyland farmers who lived farther from the church and had to care for livestock.

Seven Sunday School classes reached a greater number of Island people than the church service itself. The average Sunday School attendance for the 5 months included in the present

TABLE 21. FAMILIES CLASSIFIED ACCORDING TO THE TOTAL NUMBER OF ORGANIZATIONS IN WHICH THEY CLAIMED MEMBERSHIP.

| Number of organizations<br>in which family<br>claimed membership | Island families |         |                             |                                 | Rural farm families |         |                                      |                                       | Rural non-farm families |         |                               |                              |
|--|-----------------|---------|-----------------------------|---------------------------------|---------------------|---------|--------------------------------------|---------------------------------------|-------------------------|---------|-------------------------------|------------------------------|
|  | All families    |         | Farm<br>families<br>percent | Non-farm<br>families<br>percent | Total               |         | Sand-<br>land<br>families<br>percent | Heavy-<br>land<br>families<br>percent | Total                   |         | Hamlet<br>families<br>percent | Other<br>families<br>percent |
|  | Number          | Percent |                             |                                 | Number              | Percent |                                      |                                       | Number                  | Percent |                               |                              |
| None.....  | 28              | 16.5    | 15.7                        | 20.0                            | 21                  | 15.7    | 14.9                                 | 18.5                                  | 7                       | 20.0    | 25.0                          | 15.8                         |
| One.....   | 65              | 38.5    | 36.5                        | 45.7                            | 49                  | 36.5    | 35.5                                 | 40.7                                  | 16                      | 45.7    | 37.5                          | 52.6                         |
| Two.....   | 31              | 18.3    | 19.4                        | 14.3                            | 26                  | 19.4    | 19.6                                 | 18.5                                  | 5                       | 14.3    | 18.8                          | 10.5                         |
| Three.....   | 23              | 13.6    | 14.2                        | 11.4                            | 19                  | 14.2    | 14.0                                 | 14.9                                  | 4                       | 11.4    | 12.5                          | 10.5                         |
| Four.....  | 8               | 4.7     | 6.0                         | .....                           | 8                   | 6.0     | 5.6                                  | 7.4                                   | .....                   | .....   | .....                         | .....                        |
| Five.....  | 7               | 4.1     | 3.0                         | 8.6                             | 4                   | 3.0     | 3.7                                  | .....                                 | 3                       | 8.6     | 6.2                           | 10.5                         |
| Six.....   | 3               | 1.8     | 2.2                         | .....                           | 3                   | 2.2     | 2.8                                  | .....                                 | .....                   | .....   | .....                         | .....                        |
| Seven.....   | 3               | 1.8     | 2.2                         | .....                           | 3                   | 2.2     | 2.8                                  | .....                                 | .....                   | .....   | .....                         | .....                        |
| Eight.....   | 1               | .6      | .7                          | .....                           | 1                   | .7      | .9                                   | .....                                 | .....                   | .....   | .....                         | .....                        |
| Total.....   | 169             | 100.0   | 100.0                       | 100.0                           | 134                 | 100.0   | 100.0                                | 100.0                                 | 35                      | 100.0   | 100.0                         | 100.0                        |

Five in six families on Muscatine Island have at least one member in some organization either on the Island or elsewhere. Sandland families were best represented both in the proportion of families which had members in some organization and in the number of organizations joined.

TABLE 22. FAMILIES CLASSIFIED ACCORDING TO THE NUMBER OF ISLAND ORGANIZATIONS IN WHICH THEY CLAIMED MEMBERSHIP.

| Number of Island<br>organizations<br>in which family<br>claimed membership | Island families |         |                             |                                 | Rural farm families |         |                                      |                                       | Rural non-farm families |         |                               |                              |
|--|-----------------|---------|-----------------------------|---------------------------------|---------------------|---------|--------------------------------------|---------------------------------------|-------------------------|---------|-------------------------------|------------------------------|
|  | All families    |         | Farm<br>families<br>percent | Non-farm<br>families<br>percent | Total               |         | Sand-<br>land<br>families<br>percent | Heavy-<br>land<br>families<br>percent | Total                   |         | Hamlet<br>families<br>percent | Other<br>families<br>percent |
|  | Number          | Percent |                             |                                 | Number              | Percent |                                      |                                       | Number                  | Percent |                               |                              |
| None.....  | 100             | 59.2    | 57.5                        | 65.8                            | 77                  | 57.5    | 54.2                                 | 70.4                                  | 23                      | 65.8    | 56.2                          | 73.7                         |
| One.....   | 23              | 13.6    | 14.2                        | 11.4                            | 19                  | 14.2    | 14.0                                 | 14.9                                  | 4                       | 11.4    | 18.8                          | 5.2                          |
| Two.....   | 15              | 8.9     | 9.7                         | 5.7                             | 13                  | 9.7     | 8.4                                  | 14.9                                  | 2                       | 5.7     | 6.2                           | 5.2                          |
| Three.....   | 13              | 7.7     | 6.7                         | 11.4                            | 9                   | 6.7     | 8.4                                  | .....                                 | 4                       | 11.4    | 18.8                          | 5.2                          |
| Four.....  | 7               | 4.1     | 5.2                         | .....                           | 7                   | 5.2     | 6.5                                  | .....                                 | .....                   | .....   | .....                         | .....                        |
| Five.....  | 5               | 2.9     | 2.2                         | 5.7                             | 3                   | 2.2     | 2.8                                  | .....                                 | 2                       | 5.7     | .....                         | 10.5                         |
| Six.....   | 3               | 1.8     | 2.2                         | .....                           | 3                   | 2.2     | 2.8                                  | .....                                 | .....                   | .....   | .....                         | .....                        |
| Seven.....   | 3               | 1.8     | 2.2                         | .....                           | 3                   | 2.2     | 2.8                                  | .....                                 | .....                   | .....   | .....                         | .....                        |
| Total.....   | 169             | 100.0   | 100.0                       | 100.0                           | 134                 | 100.0   | 100.0                                | 100.0                                 | 35                      | 100.0   | 100.0                         | 100.0                        |

Two in five families on Muscatine Island have one or more members in Island organizations. Sandland farmers had the highest proportion of membership.



TABLE 23. FAMILIES CLASSIFIED BY THE NUMBER OF ALL ORGANIZATIONS IN WHICH THEY PARTICIPATED.

| Number of organizations<br>in which family<br>participated | Island families |         |                 |                     | Rural farm families |         |                          |                           | Rural non-farm families |         |                   |                  |
|--|-----------------|---------|-----------------|---------------------|---------------------|---------|--------------------------|---------------------------|-------------------------|---------|-------------------|------------------|
|  | Total           |         | Farm<br>percent | Non-farm<br>percent | Total               |         | Sand-<br>land<br>percent | Heavy-<br>land<br>percent | Total                   |         | Hamlet<br>percent | Other<br>percent |
|  | Number          | Percent |                 |                     | Number              | Percent |                          |                           | Number                  | Percent |                   |                  |
| None.....  | 80              | 47.3    | 45.4            | 54.3                | 61                  | 45.4    | 40.1                     | 66.6                      | 19                      | 54.3    | 56.2              | 52.6             |
| One.....   | 33              | 19.5    | 19.4            | 20.0                | 26                  | 91.4    | 21.5                     | 11.1                      | 7                       | 20.0    | 25.0              | 15.8             |
| Two.....   | 15              | 8.9     | 9.7             | 5.7                 | 13                  | 9.7     | 6.5                      | 22.2                      | 2                       | 5.7     | .....             | 10.5             |
| Three.....   | 20              | 11.8    | 11.9            | 11.4                | 16                  | 11.9    | 14.9                     | .....                     | 4                       | 11.4    | 12.5              | 10.5             |
| Four.....  | 7               | 4.1     | 5.2             | .....               | 7                   | 5.2     | 6.5                      | .....                     | .....                   | .....   | .....             | .....            |
| Five.....  | 7               | 4.1     | 3.0             | .....               | 4                   | 3.0     | 3.7                      | .....                     | 3                       | 8.6     | 6.2               | 10.5             |
| Six.....   | 3               | 1.8     | 2.2             | .....               | 3                   | 2.2     | 2.8                      | .....                     | .....                   | .....   | .....             | .....            |
| Seven.....   | 3               | 1.8     | 2.2             | .....               | 3                   | 2.2     | 2.8                      | .....                     | .....                   | .....   | .....             | .....            |
| Eight.....   | 1               | .6      | .7              | .....               | 1                   | .7      | .9                       | .....                     | .....                   | .....   | .....             | .....            |
| Total.....   | 169             | 100.0   | 100.0           | 100.0               | 134                 | 100.0   | 100.0                    | 100.0                     | 35                      | 100.0   | 100.0             | 100.0            |

Half of all families on Muscatine Island participated in some organized group. Sandland farmers had a larger proportion participating in a larger number of organizations than heavyland farmers.

TABLE 24. FAMILIES CLASSIFIED ACCORDING TO THE NUMBER OF ISLAND ORGANIZATIONS IN WHICH THEY PARTICIPATED.

| Number of<br>Island organizations<br>in which family<br>participated | Entire island |         |                 |                     | Rural farm |         |                 |                  | Non-farm rural |         |                   |                  |
|--|---------------|---------|-----------------|---------------------|------------|---------|-----------------|------------------|----------------|---------|-------------------|------------------|
|  | Total         |         | Farm<br>percent | Non-farm<br>percent | Total      |         | Sand<br>percent | Heavy<br>percent | Total          |         | Hamlet<br>percent | Other<br>percent |
|  | Number        | Percent |                 |                     | Number     | Percent |                 |                  | Number         | Percent |                   |                  |
| None.....  | 111           | 65.7    | 63.4            | 74.3                | 85         | 63.4    | 60.7            | 74.1             | 26             | 74.3    | 75.0              | 73.7             |
| One.....   | 13            | 7.7     | 8.2             | 5.7                 | 11         | 8.2     | 7.5             | 11.1             | 2              | 5.7     | 6.2               | 5.2              |
| Two.....   | 14            | 8.3     | 9.7             | 2.8                 | 13         | 9.7     | 8.4             | 14.8             | 1              | 2.9     | .....             | 5.2              |
| Three.....   | 12            | 7.2     | 6.7             | 8.6                 | 9          | 6.7     | 8.4             | .....            | 3              | 8.6     | 12.5              | 5.2              |
| Four.....  | 8             | 4.7     | 5.2             | 2.8                 | 7          | 5.2     | 6.5             | .....            | 1              | 2.9     | 6.2               | .....            |
| Five.....  | 6             | 3.5     | 3.0             | 5.7                 | 4          | 3.0     | 3.7             | .....            | 2              | 5.7     | .....             | 10.5             |
| Six.....   | 2             | 1.1     | 1.4             | .....               | 2          | 1.4     | 1.9             | .....            | .....          | .....   | .....             | .....            |
| Seven.....   | 3             | 1.8     | 2.2             | .....               | 3          | 2.2     | 2.8             | .....            | .....          | .....   | .....             | .....            |
| Total.....   | 169           | 100.0   | 100.0           | 100.0               | 134        | 100.0   | 100.0           | 100.0            | 35             | 100.0   | 100.0             | 100.0            |

Slightly more than one family in three on Muscatine Island participated in one or more Island organizations. Sandland farmers participated most; heavyland farmers participated least.



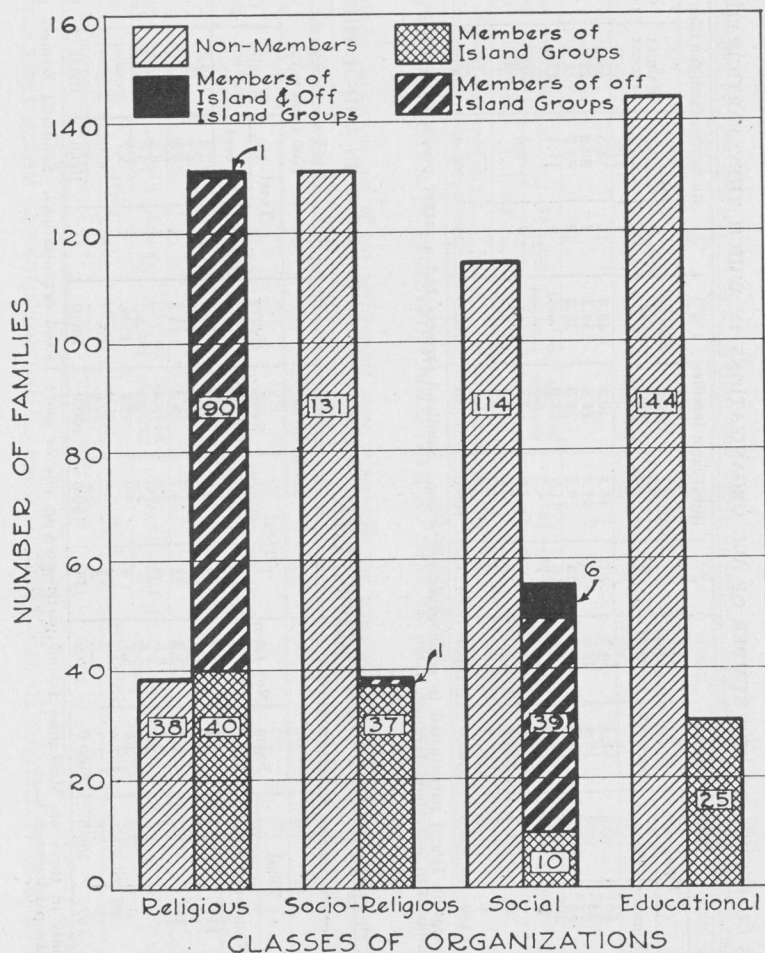


Fig. 10. Families classified by membership in various organizations. Membership of Island families was highest in religious and social organizations due to membership in groups not on the Island. The high proportion of non-members was most significant.

survey was 69 with a record attendance of 92 persons. Classes were maintained for persons of all ages. The program of religious education had been broadened in the case of three of the classes which held social meetings monthly. This broad-

ened program added to the effectiveness of the Sunday School program and made a contribution to the social life of the community.

The Ladies' Aid was composed of a small, select and rather active group of women mostly over 45 years of age. The church depended upon this organization for financial support, and the aid had a controlling voice in church affairs. The Ladies' Aid contributed generously to the church, served the church dinners and conducted the church bazaars. The Ladies' Aid owned and controlled the only hall in Fruitland which was available for social events. Controversy had arisen concerning the use of the hall for certain social events. Aid members frowned upon the activities of the young people which seemed frivolous, sacrilegious and irreverent when judged by their standards. Differences in traditional background, coupled with undiplomatic tactics, widened the breach between young and old and made understanding difficult.

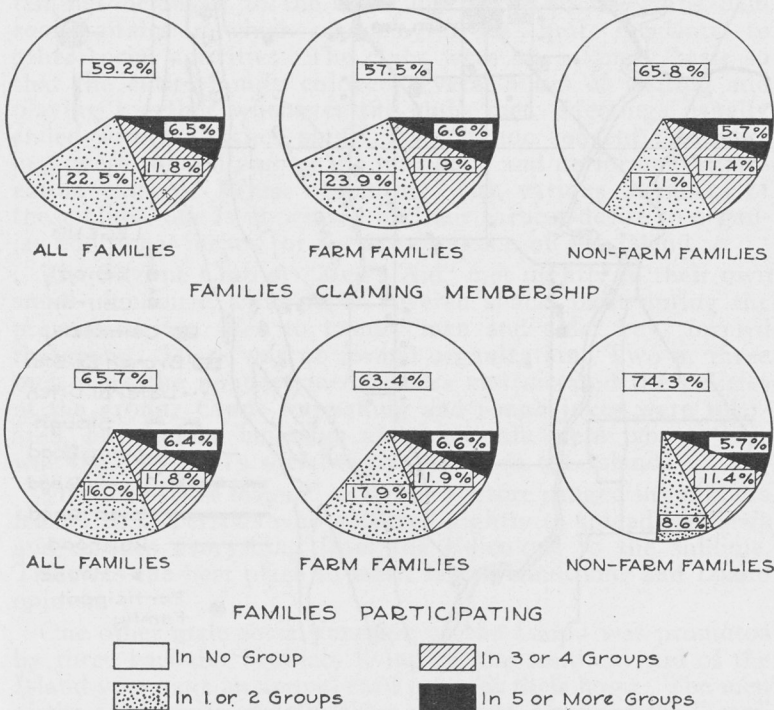


Fig. 11. Families classified by membership and participation in Island organizations. More families belonged to Island organizations than participated in them. Farm families both belonged more and participated more than non-farm families.

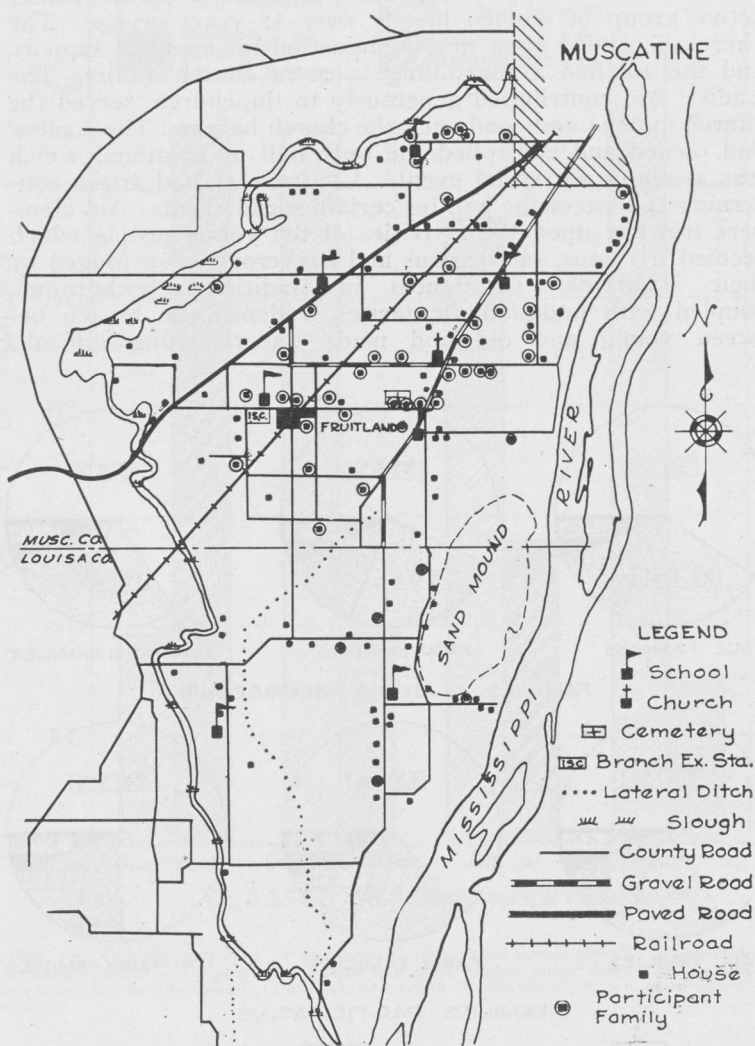


Fig. 12. Map of Muscatine Island showing location of families participating in Island organizations. Farm families which attended meetings of Island organizations were grouped closely together and lived on the north central part of the Island. Few heavyland families and few families in Port Louisa Township were included.

In 1934 the Cemetery Association was reorganized and again assumed control of the Island Cemetery and all its affairs. Two local persons, both church members, were making an exhaustive study of the cemetery situation and trying to complete the records which had been destroyed by the same fire which destroyed the records of the church.

### SOCIAL AND EDUCATIONAL ORGANIZATIONS AND ACTIVITIES

Few social and educational organizations were active on the Island. Most active among the social organizations were the I. C. C. and the C. C. C. social clubs through which the three previously mentioned Sunday School classes carried on a regular program of social events as a natural outgrowth of their need for additional social expression. These two clubs were the most experienced social groups on the Island.

Two card clubs functioned during the winter months. The Euchre Club had a membership of four families, while eight families belonged to the 500 Club. Both of the clubs held social affairs in which card playing was quite incidental to other social activities. The clubs were on a family basis so that the entire family enjoyed several hours of visiting and playing together whenever the clubs met. Meetings usually ended with a "kitchen sing." By common consent the meetings were rotated among the members, and no formal organization existed. When consulting with various members of these clubs, one is impressed by their earnest desire to organize additional means for social expression on the Island.

The Skyline Club or "Men's Aid" met nightly in their own small clubhouse, a tar-paper covered shack, built during the present survey. Ten to twenty men and older boys formed the group. There was no formal organization. Two or three men were the unquestioned leaders and dictated the policies of the group. Crude funmaking and rough jokes were tolerated, but vicious language and loud talk were taboo. This was the only men's social organization on the Island.

The "hot stove league" at the local store ranged in numbers from 1 to 25 persons who gathered nightly to spread the news and discuss everything from the ridiculous to the sublime. This was the best place to learn Island conditions and Island opinion.

One other male social function on the Island was promoted by three bachelor brothers living on the southern end of the Island who gave an annual card party at their home. The men of the community, mostly older residents, attended the "stag" party and spent the evening reminiscing of earlier days and experiences on the Island.



Educational clubs consisted of the organized home project work and the girls' 4-H club (fig. 10). Both of these were active and served effectively during the winter in which this survey was made. Home project work was organized in each school district under the leadership of the county home project leader. Seventy-five different women attended one or more meetings, although only 16 families reported membership in the organization. School district leaders met with the county leader to get information and training which they as local leaders passed on in an organized way to other interested women in the district in which they lived. None of the school districts in Port Louisa Township was organized for home project work. The entire township (Fruitland) held a general social and educational meeting monthly which was open to the entire community. Home project work was first sponsored by women living on the heavyland, and they remained among its most enthusiastic supporters. This was the only Island organization in which any member of a heavyland family had a leading part. This group had worked consistently for community-wide organization for the entire Island and had campaigned for the community club and for a community hall.

The Fruitland Sunshine 4-H Club, which was reorganized in 1931 with 32 girls as members, had 10 members in 1933 representing four families on the Island. Of these members four girls were from non-farm homes. Lack of enthusiastic leadership, periods of inactivity and a weak social program had contributed to the decline. The spirit of the present group was good, but more members were needed. A large group of farm girls, 40 or more, was eligible for membership and the non-farm girls, who could also be included, increased the eligible list to over 50. Careful selection of projects and social

TABLE 25. MEMBERSHIP OF FARM FAMILIES IN ALL ORGANIZATIONS BY TOWNSHIP AND BY TENURE STATUS.

| Number of organizations in which the family claimed membership | In Fruitland Township |         |                |                 | In Port Louisa Township |         |                |                 |
|--|-----------------------|---------|----------------|-----------------|-------------------------|---------|----------------|-----------------|
|  | Total                 |         | Owners percent | Renters percent | Total                   |         | Owners percent | Renters percent |
|  | Number                | Percent |                |                 | Number                  | Percent |                |                 |
| None.....  | 14                    | 14.0    | 10.2           | 17.6            | 7                       | 20.6    | 16.6           | 22.7            |
| One.....   | 29                    | 29.0    | 16.3           | 41.1            | 20                      | 58.8    | 50.0           | 63.6            |
| Two.....   | 23                    | 23.0    | 28.5           | 17.6            | 3                       | 8.8     | 16.6           | 4.5             |
| Three.....   | 16                    | 16.0    | 20.4           | 11.7            | 3                       | 8.8     | 16.6           | 4.5             |
| Four.....  | 7                     | 7.0     | 8.1            | 5.8             | 1                       | 3.0     | .....          | 4.5             |
| Five.....  | 4                     | 4.0     | 6.1            | 1.9             | .....                   | .....   | .....          | .....           |
| Six.....   | 3                     | 3.0     | 6.1            | .....           | .....                   | .....   | .....          | .....           |
| Seven.....   | 3                     | 3.0     | 2.0            | 4.0             | .....                   | .....   | .....          | .....           |
| Eight.....   | 1                     | 1.0     | 2.0            | .....           | .....                   | .....   | .....          | .....           |
| Total families.....  | 100                   | 100.0   | 100.0          | 100.0           | 34                      | 100.0   | 100.0          | 100.0           |

More than five in six farm families belonged to some organization. More owners belonged than renters, and farmers in Fruitland Township had a higher proportional membership than those in Port Louisa Township.



TABLE 26. MEMBERSHIP OF FARM FAMILIES IN ISLAND ORGANIZATIONS BY TOWNSHIP AND BY TENURE STATUS.

| Number of Island organizations in which the family claimed membership | In Fruitland Township |         |                |                 | In Port Louisa Township |         |                |                 |
|---|-----------------------|---------|----------------|-----------------|-------------------------|---------|----------------|-----------------|
|   | Total                 |         | Owners percent | Renters percent | Total                   |         | Owners percent | Renters percent |
|   | Number                | Percent |                |                 | Number                  | Percent |                |                 |
| None.....   | 52                    | 52.0    | 38.8           | 64.7            | 25                      | 73.5    | 58.3           | 81.8            |
| One.....  | 14                    | 14.0    | 22.4           | 5.8             | 5                       | 14.7    | 25.0           | 9.1             |
| Two.....  | 13                    | 13.0    | 12.2           | 13.7            | .....                   | .....   | .....          | .....           |
| Three.....  | 6                     | 6.0     | 8.1            | 4.0             | 3                       | 8.8     | 16.6           | 4.5             |
| Four.....   | 6                     | 6.0     | 6.1            | 5.8             | 1                       | 3.0     | .....          | 4.5             |
| Five.....   | 3                     | 3.0     | 4.0            | 1.9             | .....                   | .....   | .....          | .....           |
| Six.....  | 3                     | 3.0     | 4.0            | 1.9             | .....                   | .....   | .....          | .....           |
| Seven.....  | 3                     | 3.0     | 4.0            | 1.9             | .....                   | .....   | .....          | .....           |
| Total.....  | 100                   | 100.0   | 100.0          | 100.0           | 34                      | 100.0   | 100.0          | 100.0           |

Membership of farm families in Island organizations was less than in all organizations (table 25). Owner-operators in Fruitland Township had the largest proportion of members. Renters in Port Louisa Township had the smallest proportional membership.

program to fit local needs might bring this club to a development comparable to any in the state.

A truck growers' institute was held in the Island church in February. Speakers from Iowa State College featured this meeting which was sponsored by the Agricultural Extension Service. Problems of Island agriculture were discussed, and reports were made on the progress of the experimental work at the Muscatine Island Field Station and at Conesville. This was the only educational meeting for men held during this survey.

#### FAMILY ATTENDANCE AT MEETINGS<sup>16</sup>

The differences between membership and attendance shown by Island families were very striking but were most pronounced between membership in and attendance at meetings of organizations not on the Island. Nearly one-half, 47.7 percent, of the families on Muscatine Island were not represented at any meeting of any organized group anywhere during September and October, 1933 (table 23). This is in sharp contrast to the fact that seven of every eight stated that their families were represented in the membership of some organization (table 21). Nearly two-thirds of all Island families were not represented at any meeting of any Island organization during these 2 months. While slightly more than one-third of the families were represented at Island meetings, three in five families indicated that they had members in some Island organization.

Of 58 Island families represented at meetings on the Island during September and October, 1933, 49 were farm families

<sup>16</sup>A family was considered to be represented at a meeting if any member of the family attended one or more meetings during September and October, 1933. Though records of attendance at meetings from Nov. 1 to April 1 were not obtained on a family basis, observations indicated that the same families attended during the winter months.

TABLE 27. PARTICIPATION OF FARM FAMILIES IN ALL ORGANIZATIONS BY TOWNSHIP AND BY TENURE STATUS.

| Number of organizations in which the family participated | In Fruitland Township |         |                |                 | In Port Louisa Township |         |                |                 |
|--|-----------------------|---------|----------------|-----------------|-------------------------|---------|----------------|-----------------|
|  | Total                 |         | Owners percent | Renters percent | Total                   |         | Owners percent | Renters percent |
|  | Number                | Percent |                |                 | Number                  | Percent |                |                 |
| None.....  | 41                    | 41.0    | 26.5           | 56.8            | 20                      | 58.8    | 50.0           | 63.6            |
| One.....   | 18                    | 18.0    | 24.5           | 11.7            | 8                       | 23.5    | 25.0           | 22.7            |
| Two.....   | 11                    | 11.0    | 10.2           | 11.7            | 2                       | 5.8     | 8.3            | 4.5             |
| Three.....   | 13                    | 13.0    | 16.3           | 9.8             | 3                       | 8.8     | 16.6           | 4.5             |
| Four.....  | 7                     | 7.0     | 8.1            | 5.8             | .....                   | .....   | .....          | .....           |
| Five.....  | 3                     | 3.0     | 4.0            | 1.9             | 1                       | 3.0     | .....          | 4.5             |
| Six.....   | 3                     | 3.0     | 6.1            | .....           | .....                   | .....   | .....          | .....           |
| Seven.....   | 3                     | 3.0     | 2.0            | 4.0             | .....                   | .....   | .....          | .....           |
| Eight.....   | 1                     | 1.0     | 2.0            | .....           | .....                   | .....   | .....          | .....           |
| Total.....   | 100                   | 100.0   | 100.0          | 100.0           | 34                      | 100.0   | 100.0          | 100.0           |

Farm families on Muscatine Island participated in few organizations not on the Island. Comparison showed owner-operators attended more frequently than renters.

(fig. 12). These farm families were living on the sandland around Fruitland and the Island church. Only seven of the families were heavyland families, and all but one of these were located in the Mittman neighborhood on the northern end of the heavyland. This neighborhood is strongly organized for home project work. Port Louisa Township was represented by five families, all located on the sandland. Two in five sandland families participated, while one in four heavyland families were represented at meetings of Island organizations.

Sandland farmers had the highest proportion of members in organizations on the Island and elsewhere. The sandlanders also had a larger proportional representation at meetings of all organizations. While 23 percent of the sandland families were represented at meetings of more than two organizations on the Island, no heavyland family was represented in the membership of more than two Island groups or was in attendance at the meetings of more than two groups, either on or off the Island, during September and October (tables 21, 22, 23 and 24).

TABLE 28. PARTICIPATION OF FARM FAMILIES IN ISLAND ORGANIZATIONS, CLASSIFIED BY TOWNSHIP AND BY TENURE STATUS.

| Number of Island organizations in which the family participated | In Fruitland Township |         |                |                 | In Port Louisa Township |         |                |                 |
|---|-----------------------|---------|----------------|-----------------|-------------------------|---------|----------------|-----------------|
|   | Total                 |         | Owners percent | Renters percent | Total                   |         | Owners percent | Renters percent |
|   | Number                | Percent |                |                 | Number                  | Percent |                |                 |
| None.....   | 56                    | 56.0    | 42.8           | 68.6            | 29                      | 85.2    | 75.0           | 90.9            |
| One.....  | 10                    | 10.0    | 18.3           | 1.9             | 1                       | 3.0     | 8.3            | .....           |
| Two.....  | 13                    | 13.0    | 12.2           | 13.7            | .....                   | .....   | .....          | .....           |
| Three.....  | 6                     | 6.0     | 8.1            | 4.0             | 3                       | 8.8     | 16.6           | 4.5             |
| Four.....   | 6                     | 6.0     | 6.1            | 5.8             | 1                       | 3.0     | .....          | 4.5             |
| Five.....   | 4                     | 4.0     | 6.1            | 1.9             | .....                   | .....   | .....          | .....           |
| Six.....  | 2                     | 2.0     | 2.0            | 1.9             | .....                   | .....   | .....          | .....           |
| Seven.....  | 3                     | 3.0     | 4.0            | 1.9             | .....                   | .....   | .....          | .....           |
| Total.....  | 100                   | 100.0   | 100.0          | 100.0           | 34                      | 100.0   | 100.0          | 100.0           |

The participation of Fruitland farmers in Island organizations was well maintained, while participation of renters in Port Louisa Township was limited to 9 percent of the families.

TABLE 29. FAMILIES CLASSIFIED BY MEMBERSHIP IN ORGANIZATIONS AND BY THE KIND OF ORGANIZATION.

| Functional class     | Membership on Island only |         | Membership off Island only |         | Membership both on and off the Island |         | No membership |         |
|----------------------|---------------------------|---------|----------------------------|---------|---------------------------------------|---------|---------------|---------|
|                      | Number                    | Percent | Number                     | Percent | Number                                | Percent | Number        | Percent |
| Religious.....       | 40                        | 23.7    | 90                         | 53.3    | 1                                     | .6      | 38            | 22.5    |
| Socio-religious..... | 37                        | 21.9    | 1                          | .6      | ..                                    | .....   | 131           | 77.5    |
| Social.....          | 10                        | 5.9     | 39                         | 23.1    | 6                                     | 3.6     | 114           | 67.5    |
| Educational.....     | 25                        | 14.8    | ....                       | .....   | ..                                    | .....   | 114           | 67.5    |

The highest proportion of the memberships of 169 families on Muscatine Island was in religious and socio-religious organizations. Nearly all the memberships off the Island were in religious or social organizations.

One family in twenty-five was represented at meetings of six or more different organizations during the 2 months already noted. The more organizations to which a family belonged the more regularly it was represented at the meetings of each of them. Conversely, those families which were low in membership were also low in attendance in the few organizations to which they belonged. When families joined Island organizations they attended more frequently than when they belonged to organizations off the Island. This fact was more than casually related to the statement preceding, because those who belonged to the largest number of organizations belonged predominantly to Island organizations. Sandland farmers joined the most organizations and had the best record for attendance.

The differences in membership and attendance between Island farm families in Fruitland Township and those in Port Louisa Township were most striking (tables 25, 26, 27 and 28). While nearly half the Fruitland farm families attended meetings of Island organizations during September and October, 1933, only one in seven of the families in Port Louisa Township attended. Port Louisa farmers were handicapped by poor roads, by the presence of more renters and by the lack of com-

TABLE 30. NUMBER AND PERCENTAGE OF PERSONS IN SIX AGE GROUPS, CLASSIFIED BY ISLAND ORGANIZATION ATTENDANCE.

| Age in years    | Number of persons | Number of organizations attended |      |     |               |
|-----------------|-------------------|----------------------------------|------|-----|---------------|
|                 |                   | None                             | One  | Two | Three or more |
|                 |                   | Percentage                       |      |     |               |
| 0-9.....        | 113               | 84.1                             | 13.1 | 2.6 | ..            |
| 10-19.....      | 145               | 79.3                             | 12.4 | 6.9 | 1.4           |
| 20-29.....      | 63                | 77.8                             | 14.3 | 3.2 | 4.7           |
| 30-39.....      | 90                | 77.8                             | 8.9  | 8.9 | 4.4           |
| 40-49.....      | 64                | 75.0                             | 17.2 | 1.6 | 6.2           |
| 50 or over..... | 120               | 75.0                             | 14.2 | 7.5 | 3.3           |
| All ages.....   | 595               | 78.5                             | 13.1 | 5.6 | 2.8           |

Relatively few of the total number of people in farm families attended meetings of Island organizations. Young and old attended in similar proportions, indicating that most group meetings on the Island were family affairs.

mon interest, but most of all, by the fact that they were not considered a part of Fruitland or a part of the Island community. This feeling developed naturally as a result of their being in another county (fig. 1). This area was a part of the Island so isolated from any other center that it had to be included as a part of the Island community. Island organizations had made no real effort to include these farm families from the southern part of the Island.

Differences in membership and participation between owner families and renter families were significant (fig. 14). Owners uniformly belonged to more organizations and attended more frequently than did renter families (tables 25, 26, 27 and 28). This was true in both the Fruitland and the Port Louisa portions of the Island. Fruitland renters and Port Louisa owners, while ranked second to Fruitland owners, showed no significant differences among themselves. Port Louisa renters were lowest in both membership and attendance, with one family in five represented in the membership of an Island group, while 1 in 10 attended. The differences between owners and renters were maintained in each township in spite of the marked differences in membership and attendance between townships.

Fruitland owner-operators had the smallest proportion of families which attended meetings elsewhere but did not attend meetings on the Island. In contrast, the membership of renter families was largely reported to be in churches not located on the Island. No family which only attended groups not located on the Island attended meetings of more than two groups.

#### INDIVIDUAL ATTENDANCE AT MEETINGS ON THE ISLAND

The organized social life of the Island revolved around the 58 families mentioned as participating (table 24), and it was unusual when any family other than these attended a meeting of any Island group.

The combined attendance of Island people at Island meetings was 6,116 during the 5-month period<sup>17</sup> (fig. 13). This was an average attendance of approximately 100 for each family attending and an average of 36 for all Island families. The attendance of 100 per family would be reached if each member of the 58 families attended one meeting per week. It is obvious, therefore, that the families which did attend were not over-active, while the majority of the families attended no meetings. Twenty-five families attended meetings of three or more groups during the period, and it was these 25

<sup>17</sup>A complete record of attendance of Island people at all meetings of any kind was kept from Nov. 1, 1933, to April 1, 1934. Attendance was not recorded by families, but constant checking by the field investigator indicated that the 58 families already mentioned were the ones which attended during the 5 months.



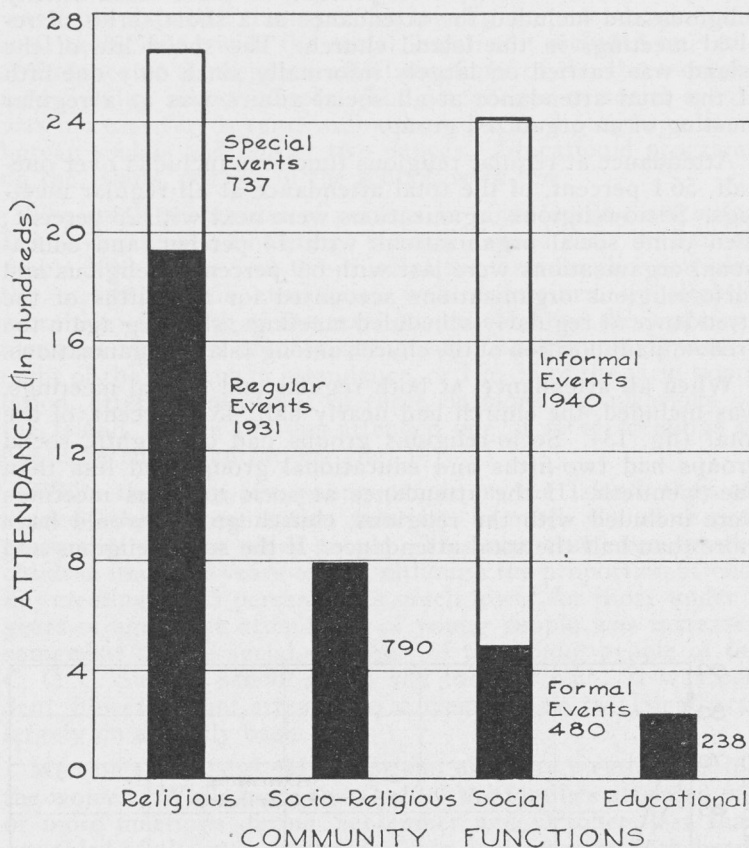


Fig. 13. Number of persons attending group meetings on Island. The attendance of persons at the meetings of Island groups indicated the outstanding place of religious and social activities and the high proportion of social events that were informal neighborly affairs.

families which furnished approximately three-fourths of the total attendance on the Island. Where less than one-sixth of the families furnish three-fourths of the attendance, it is clear that the remaining families were practically without organized social contact.

Slightly more than half, 56.2 percent, of the total attendance was at regularly scheduled meetings of the various organizations. A high proportion of the meetings were special or informal in character. Though these special activities were

mostly social functions, 27.5 percent of them were chiefly religious and included the attendance at a short series of revival meetings in the Island church. The social life of the Island was carried on largely informally since only one-fifth of the total attendance at all social affairs was at a regular meeting of an organized group.

Attendance at regular religious functions included over one-half, 56.1 percent, of the total attendance at all regular meetings. Socio-religious organizations were next with 23 percent; then came social organizations with 14 percent, and educational organizations were last with 6.9 percent. Religious and socio-religious organizations accounted for four-fifths of the attendance at regularly scheduled meetings, showing again the predominant position of the church among Island organizations.

When all attendance, at both regular and special meetings, was included, the church had nearly half, 43.7 percent, of the total (fig. 13). Socio-religious groups had one-eighth, social groups had two-fifths and educational groups had less than one-twentieth. If the attendance at socio-religious meetings were included with the religious, church groups would have more than half the total attendance. If the socio-religious and

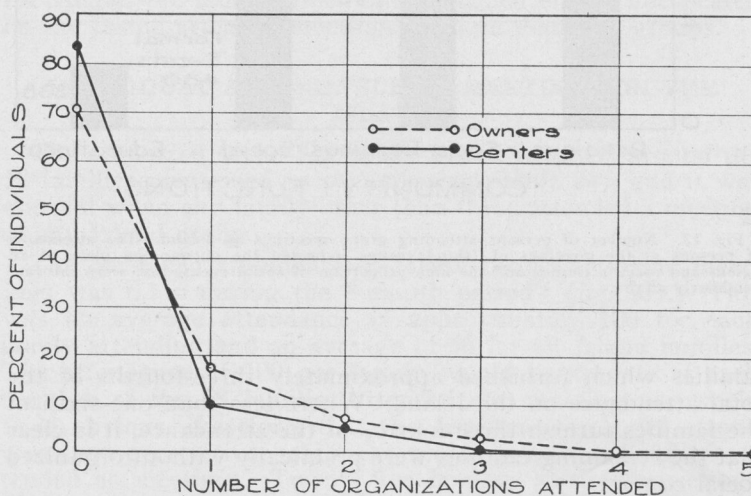


Fig. 14. Percentage of individuals attending no meetings or meetings of one or more organizations. Significant differences between the participation of individuals living in owner and tenant families emphasized the facts that non-attendance was the rule and that relatively few individuals in farm families attended meetings of more than one organization.

the social were combined, the attendance at social functions was more than half the total. Socio-religious attendance could well be included with the social, because it included only the attendance at the regular social meetings of the three organized Sunday school classes. The attendance at social events was increased by several well-attended school programs, farm bureau socials and one or two dances. Educational programs on the Island, outside of the school, were few.

The small proportion of persons in farm families attending Island organization meetings sharply defined their limitations (table 30). While over one-third of the farm families attended the meetings, this attendance was maintained by slightly more than one-fifth of the rural people. Most of these persons attended meetings of only one group. Approximately one in eight of the persons in attendance, or 1 in 35 of the farm population, attended meetings of three or more organizations on the Island. Three persons attended one or more meetings of five different organizations (fig. 14).

While there are few young people on the Island, they attended Island organization meetings in much the same proportion as did the older people. This was true even for the children under 10 years of age, although the proportion attending meetings, 12.5 percent, was much lower for those under 5 years of age. The attendance of young people was increased somewhat by the social meetings of the young people of the C. C. C. Sunday school group and the 4-H club. It was evident, however, that attendance at meetings on the Island was largely on a family basis.

Men on the Island did not attend as many meetings as did the women. While more than half of the families attended one or more meetings during September and October, less than one-third of the men attended. This held true for both heads of families and for other male members who attended in the same proportion.

Men attended church and church affairs almost to the exclusion of other meetings. In only one family did the men attend any meeting of any other organization during this period. Church attendance among farm families on the Island is essentially an affair for the entire family, and this fact appears to be responsible for much of the attendance of heads of families.

Only three heads of non-farm families reported attendance at any meeting of any group during the 2 months under consideration. It is evident from the data presented that Island men generally lack experience in organized groups and that Island organizations did not give them the kind of group experience they enjoy.

### COMMUNITY AND TRADE CENTER RELATIONSHIPS

The development of community solidarity on the Island depended upon the neighborliness of its people and the services of its various organizations and agencies. Most promising among these was the strong position of the church, the organization of educational groups and the close concentration of leadership in the few families which belonged to and attended most Island organization meetings. Any consideration of solidarity introduced elements of weakness previously noted but was important because personal loyalties to organizations are strong among their supporters on the Island.

Several agencies in Fruitland found difficulty in competing with Muscatine. The one general store served local trade but was not conducted in a manner to encourage increased business. Postoffice and blacksmith shop remained, and a local mechanic made automobile repairs of a minor nature for local people.

Muscatine to an increased extent had come to be the city center for Island people. There they did their special shopping, their banking, went to high school and attended the theater. Physicians, dentists and lawyers were there. Muscatine was the county seat and no other town or city was so near or so available. Muscatine also became the port of departure through which Island people entered the world beyond. While the people of the Island averaged a trip to Muscatine weekly, they had no organized social life there.

### SUMMARY

The lack of prosperity in Island agriculture was evidenced by the low land values, the idle land, the poor condition of many of the homes and the lack of certain home conveniences. It was closely associated with the excessive migration of young persons during the 15 years just past which resulted in the small number of persons between 20 to 30 years of age, with the small membership and attendance at meetings of Island organizations and with the noticeable lack of local leadership.

Organizations on the Island were characterized by the dominant position of the Island church which sponsored more than half the total organized contact of persons on the Island, by the small membership and attendance at meetings—confined mostly to sandland farmers—by the informal nature of most social affairs, and by the relatively few educational activities for men. These conditions, coupled with its increased dependence on Muscatine, made it difficult for Fruitland to maintain its former position of importance.



The sandy soil made corn growing unprofitable and encouraged the production of melons, cantaloupes, sweet potatoes and vegetable crops. Within limits set by soil and climate, the choice of farm enterprises was determined partly by traditional practice, partly by the prevalence of plant diseases, partly by jealousy between Island farmers and those in nearby producing areas, and partly by farm management considerations. Farm income was limited by the choice of enterprise and also by plant diseases, by ineffective farm management practices and by difficulties in marketing. The dominance of sandland farmers was explained by their numerical superiority, by their natural concentration near the center of the Island and by the fact that some of the heavyland farmers became established since the completion of the drainage ditch.

The relationship between land utilization and social organizations seemed to be reciprocal rather than causal. While decreased farm income decreased the support for local organizations, the weakening of organizations made it more difficult for Island people to solve either economic or social problems. As organizations weakened, fewer leaders and followers were developed who could cooperate in the development of an Island program. As a result it was necessary to work individually, family by family, because organizations were divided in leadership and included only a minority of Island families.

Muscatine Island had adequate population resources, with good biological equipment and with a relatively large proportion of persons between the ages of 10 and 20 years. Island people were not well supplied with educational opportunities but were capable of satisfactory development. Further training and experience were needed to develop new leaders for new programs. This could come only through organization.

### **TOWARD AN ISLAND PROGRAM**

Information already presented indicates how the Island has developed, what the local problems are, how the people are working toward the solution of these problems and also the major difficulties encountered and success attained. To indicate further the direction in which the Island program might develop, three steps remain: First, indicate the opinions and the interests of the Island people; second, indicate briefly the Island activities from the time of the survey, 1933, to the present; third, indicate practical methods by which the people might accomplish their desired goals.

A systematic attempt was made to discover what Island farmers considered the most important local problems and

what opinions were commonly held by Island people which might affect their future program. Four detrimental features were prominently mentioned which are presented here in the order of their local emphasis: (1) Local conflicts of various kinds, (2) the drainage district, (3) lack of social activities, and (4) high taxes.

Farmers stated their opinion on the causes of local conflict somewhat vaguely, and one-third stated no reason for the present situation. Nearly all of them insisted that local conflicts and the inability of people to work together were the most serious problem. Two in five farmers stated that personal jealousy and gossip were the most important causes. One in six indicated that unfair competition was most important. Owners and renters agreed in their opinions on the problem of local conflict.

Three in five farmers stated that the drainage ditch should be modified or eliminated. Only six were for modification or repair. Twice as many farm owners as renters mentioned the ditch. Slightly more than 1 farmer in 10 mentioned a desire for more social activities. Renters were especially insistent on this point. Nearly 1 in 10 favored the planting of trees and the development of more fish and game which was closely related to the drainage problem. One in sixteen mentioned the need for lower taxes. These were all farm owners. Improved schools, a new cash crop, cheaper electric current and changes in telephone and rural mail delivery services seemed desirable to a few, but in all, these were mentioned only eight times.

Indifference to problems and the lack of participation in Island affairs were considered by the authors to be the most serious hindrances to Island development. These problems were closely related to another, the need for programs of activities which would challenge the interest of Island people and inspire them to action. The authors made a broad investigation of these interests and found them to be similar to those held by farmers elsewhere.<sup>18</sup>

Generally expressed, the interests of Island farmers rank as follows: First, church activities; second, social activities; third, home development; fourth, scientific farming; fifth, school activities; sixth, farmer organizations; seventh, politics; eighth, young people's activities. Nearly 50 percent more families expressed church interests than any other. Scientific farming, home development, and school activities were about equally strong. Owner families expressed twice as many interests per family as renter families, which were interested largely in church, school and social activities.

<sup>18</sup>This part of the study was repeated in two townships in Cerro Gordo County in 1934.

The authors are convinced that it is possible and practical to develop a program in line with the interests expressed above which will hold the attention of Island people, give them self-expression and experience and increase their self-respect. Recent developments substantiate this belief, and probably no recent development is more outstanding than the organization of the community orchestra. The authors repeatedly noticed the latent ability of Island people and their enthusiasm for activities, especially for activities of a social nature. Until unfavorable attitudes were aroused, local programs and local leaders developed rapidly.

### THE PRESENT PROGRAM

The general outlines of the existing program were indicated in a previous section of this report. This program continued during the time of the survey, and frequently the authors were asked for assistance by Island leaders.<sup>19</sup>

The Island program has also developed since the survey in 1933. All the organizations then in operation have continued, and new ones have been organized. A boys' 4-H Club was organized in 1934, with the raising of sweet potatoes as a project. This was the only sweet potato club in Iowa, and it ranked first among sweet potato clubs in the United States in 1935.

A community orchestra was organized in 1934 by one of the more progressive farm women. With an orchestra leader from Muscatine directing this local talent group, notable success was attained. At the end of its first year of activity this orchestra played a concert daily at the Iowa State Fair. The results attained by the orchestra have encouraged the development of community orchestras in two other sections of Muscatine County. The Island orchestra forms the nucleus for the Muscatine County Orchestra which played at the State Fair in 1936.

In 1935 the leader in charge of experimental work at the Muscatine Island Field Station was made an extension specialist to enable him to give more assistance in solving production problems of sandland farmers. Also the Muscatine Island Vegetable Growers Association was organized by Island farmers, in cooperation with the Iowa Agricultural Experiment Station, to sponsor and promote the work of the Field Station. More land and facilities were secured to expand the research program.

In 1936 the general store in Fruitland burned, but business was resumed immediately in a nearby storage house. The

<sup>19</sup>Most frequent were the requests for help in organizations and in the development of recreational programs. The junior author had to limit the assistance given, especially where it might bias the results of the survey by increasing meetings and attendance.

Ladies' Aid Hall in Fruitland was sold to an Island family which is opening a new grocery and general store in the building. The occupancy of this building leaves no meeting place for organizations in Fruitland. Increased agitation for a community hall resulted in a decision of the Island church officials to build a community hall on the property near the church. Plans are under way to complete the hall in 1937.

The community club was reorganized in 1935 and has held several well-attended meetings in the church. Programs have emphasized social activities and entertainment. Present plans indicate that the community club will continue these activities throughout the year.

At present the Island is considered by county extension workers to be an average rural community when compared with other townships in Muscatine County. The future program will develop along lines to be determined by certain choices which will be made by Island people. Possible alternative choices are suggested here to assist the people of Muscatine Island and similar rural areas to select the most effective program—a program which will be in line with the present social and economic situation, with the interests of the people and with the locally recognized needs. Further discussion of the program will consider choices which might be made, and the elaboration of specific details will not be attempted.

#### THE DIRECTION OF FUTURE DEVELOPMENT

In planning a program the choice of objectives is one of the first alternatives to be considered. While the choice between immediate and long time objectives is pertinent, the real problem lies deeper in the choice between economic and social objectives, that is, between good farming and good living. Both of these are necessary, and the choice is merely a matter of balance and of emphasis at a specific time. Economic problems were attacked first, and, more recently, the increase in social activities has tended to balance the previous one-sided program. As social development becomes more nearly normal, Island farmers may well direct an intensive attack upon the unsolved problems of agricultural production and marketing.

Both of the broader objectives mentioned can be accomplished most effectively by organized groups. Organizations have increased as Island people attempted to solve their problems. Individual efforts may supplement, but obviously cannot effectively replace organized effort. Since the program of the future will depend largely on the programs of organ-



ized groups, the programs of several of the more important existing organizations will be considered.

The Extension Service and the Farm Bureau will continue work already begun for the solution of problems of agricultural production. Marketing information is greatly needed, and market news might be furnished. The sale of produce by truck on central markets and the development of roadside stands along the main highways might be increased. Home project work, already serving a representative Island group, might well advocate the spread of Farm Bureau and extension services to that part of the Island which, though it is in Louisa County, is definitely a part of the Island.

Extension specialist help already provided might assist by stimulating a desire for information, by furnishing it in usable form and by assisting farmers to apply it on their own farms. This work will need to be done largely on an individual farm-by-farm basis until more farmers become interested, until existing organizations adopt similar objectives and until good farming becomes a matter for general pride.

The Muscatine Island Vegetable Growers Association should continue its present program of sponsoring the cooperative experimental work of the Muscatine Island Field Station. It might conceivably render certain cooperative services such as the purchase of supplies for Island farmers. To do this might seriously divide the interests of its members and the association could succeed in such a program only with a larger, more representative membership. The association should concentrate on benefits for Island farmers and accept the responsibility for making its benefits available to the entire Island.

The Island schools should encourage every child to complete the eighth grade and become eligible for high school by passing the eighth grade examinations. Arrangements should be made so that high school education for Island youth can be furnished at minimum cost to parents. This might involve some arrangements for transportation or for assistance in securing part-time work in Muscatine to defray school expenses. This last might well become a responsibility of the city or of some of its public spirited agencies. Island schools should cooperate with the Farm Bureau in the sponsorship and promotion of forums and evening schools on subjects contributing to the solution of farm and community problems and should encourage local people to participate and eventually to lead in them.

The church as the dominant organization must play an especially important role. Much depends upon the use of the new community building now under way. If the church opens the building for the use of all organizations sponsored by the

community it will become a true community hall, owned by the church. If the new hall becomes a center for church social activities, to the exclusion of certain Island organizations, the result may be quite different. Under the latter arrangement it will be necessary for other Island groups to secure a suitable center for community activities. As the leading organization in an agricultural area, the church might become interested in the development of a standard rural church program which would bring it into closer relationship with the everyday life and problems of its people. The alternative choice would be for the church to withdraw from interest in and control of other than religious affairs in the community. Church officials have consistently chosen the course leading to community participation. The building of the community hall with its attendant responsibilities has made their decision practically irrevocable.

The community club will be vitally affected by the decision of the church, and it should use every opportunity to cooperate in building the community hall. The need for a broad program of social and educational activities on the Island has been repeatedly expressed. The club is the one organization best fitted to promote such a program. It should invite and encourage the cooperation of church people and of other groups in the common enterprise of developing the community.

Recreational activities should be a function of nearly all organized groups on the Island. Program materials should be locally available to group leaders at all times. A leader training institute is needed to show local leaders how to use the materials provided and to build confidence through practice in developing more interesting programs.

While information on marketing can be given through present organizations none of them is able to solve present marketing problems. Island farmers will likely make increased use of attractive roadside stands, located on the main roads, and they will also truck more produce direct to central markets. If, after a study of the possibilities, it is decided that cooperative marketing is desirable, a new organization will be needed to make it effective. Such plans may develop slowly and will likely develop as an outgrowth of various successful marketing experiences during the next few years.

A minimum of new organizations will be needed on Muscatine Island during the next few years. The principal task will be to broaden the programs of existing organizations and increase their membership to cover the entire Island. In addition, all Island organizations must work collectively to satisfactorily solve the larger Island problems. By doing so they

will be working most effectively to promote unity in Island development. Remembering that Island participation is largely a family affair, organizations will be most effective when they are working together in similar close relationships.